IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application of:	Lester Ludwig, et al.	**Confirmation No.:**	6289
Serial No.:	10/721,905	**Art Unit:**	2153
Filed:	November 26, 2003	**Examiner:**	Reilly, Sean M.
For:	*METHOD FOR REAL-TIME COMMUNICATION BETWEEN PLURAL USERS*	**Attorney Docket No.:**	A8680

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APPELLANTS' BRIEF UNDER 37 C.F.R. § 41.37

This Appeal Brief in conjunction with the previously filed Notice of Appeal appeals the §103 and provisional double patenting rejections of claims 1-4, 8-12, 14, 16-35 and 39-50 by the United States Patent and Trademark Office in a second Office Action dated February 6, 2006.

This Appeal Brief demonstrates that such rejections cannot be sustained for at least the following reasons:

A) The combination of references cited by Examiner Dinh does not teach all the claimed elements.

B) The allegedly obvious combination of the references violates at least three established principles required to support an obviousness finding:

1. There must be motivation to combine references:
   There can be no motivation to combine references if combining secondary reference features renders the primary reference unsuitable for its primary purpose;
2. The references must be analogous prior art; and
3. The combination must be obvious to those skilled in the art.

C) The double patenting rejection is improper because the claims of this application are patentably different from those of at least one of the co-pending related applications.

The fee required under 37 C.F.R. § 1.17(c) is being filed concurrently herewith.

Table of Contents

I. THE REAL PARTY IN INTEREST

The real party in interest in this appeal is Collaboration Properties, Inc., the assignee of this application, and a subsidiary of Avistar Communications Corporation, Inc.

II. RELATED APPEALS AND INTERFERENCES

This Appeal is being filed concurrently with the Appeal in application 10/722,051.

In addition, appeals have, in the past, been filed in the following applications:

1. Application No. 09/702,737, Appeal No. 2004-0485;
2. Patent No. 6,898,620, Application No. 09/072,549, Appeal No. 2003-0663;
3. Patent No. 7,054,904, Application No. 10/120,307, Appeal No. 2005-2230; and
4. European Patent Application No. 99202661.7, Appeal No. T0403/02-3.5.3.

Copies of decisions of the above are attached as Section X, "Related Proceedings Appendix."

Appellants are not aware of any other appeals, judicial proceedings or interferences that will affect directly, will be affected directly by, or will otherwise have a bearing on, the decision in this appeal.

III. STATUS OF THE CLAIMS

The status of the claims is as follows:

- Claims canceled: 5-7, 13, 15 and 36-38
- Claims withdrawn from consideration but not cancelled: None.
- Claims pending: 1-4, 8-12, 14, 16-35 and 39-50.
- Claims rejected: 1-4, 8-12, 14, 16-35 and 39-50.
- Claims appealed: 1-4, 8-12, 14, 16-35 and 39-50.

IV. STATUS OF AMENDMENTS

All amendments have been entered. A copy of the appealed claims is attached as Section VIII, "Claims Appendix."

V. SUMMARY OF THE CLAIMED SUBJECT MATTER

This application has four independent claims, namely claims 1, 12, 25, and 35. As described in detail below, all independent claims have a set of common features and each has certain unique features.

A. Common Features: Real-time, networked communication displayed at users' devices, maintaining record of user log-in location, etc.

The claimed invention, and as shown in Figure 1, relates to real-time communication between physically separated users. Users[1] are located at any of numerous communication devices (e.g. workstations WS at 12.1 to 12.10) each of which has an associated display.[2] Users employ these devices to connect to one or more Wide Area (WAN 15) or Local Area Networks (MLANs 10) by using their respective communication devices[3]. A first (calling) user establishes real-time communications with a second (called) user by selecting[4] a user identifier displayed on the first user's device-display (e.g. monitor 200). In response, collaboration initiation software causes the necessary addressing information to be retrieved to establish real-time communication[5]. Communications are then displayed on the displays of the users' communications devices[6].

1 Also referred to as participants, conferees, callees, etc.
2 See, for example, figures 2A, 18A (monitor 200), etc.
3 See application's specification paragraph [0050].
4 See application's specification paragraphs [0138] to [0140].
5 See application's specification paragraph [0128] for example.
6 See application's specification paragraph [0123] as well as figures 2A, 2B, 8A to 8C, and 35 to 42.

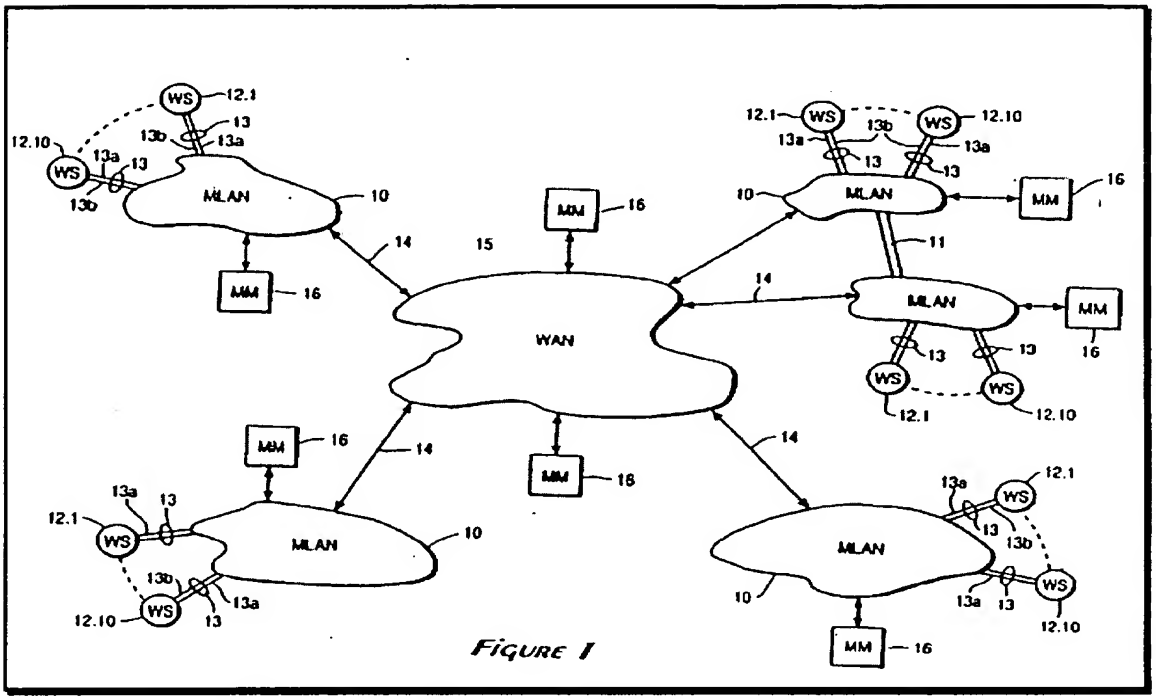

FIGURE 1

In an embodiment of the invention, the system maintains at least one service record for the logged-in users. This service record includes both user identification information and associated location information as to where the user is logged-in. This login-location information may take any of a variety of forms. It can, for example, be very specific, even to the extent of including port (address) information. In one example, "[t]his service record identifies the location of the callee's[7] Collaboration Initiator as well as the network ports that the callee is connected to."[8] The location information can also more broadly include the general location where the user has logged-in. For example: "for real-time sessions, the Collaboration Initiator queries the Service Server module 69 inside AVNM 63 for the current location of the specified participants. Using this location information, it communicates (via the AVNM) with the Collaboration Initiators of the other session participants to coordinate session setup."[9]

Importantly, the location where the user logs in is remote from the network server(s). This is apparent from Figure 1 reproduced above. As described in the specification of the '051 application, the system uses login location information to track users in order to establish communications between users. The mechanism for achieving this is described, for example as:

7 A callee is a user that is being called by another user.
8 See application's specification paragraph [0141].

> [0123] . . . "Information is also sent from the Collaboration Initiator to the AVNM indicating the location of the user, the types of services available on that workstation (e.g., videoconferencing, data conferencing, telephony, etc.) and other relevant initialization information."
>
> [0066] "When one or more conferees are at distant locations, the respective MLAN Servers 60 of the involved MLANs 10, on a peer-to-peer basis, control their respective A/V Switching Circuitry 30 ... as required for interconnecting the conferees MLAN servers 60 ... so that each MLAN 10 contains updated information as to the capabilities of all of the system CMWs 12, and also the current locations of all parties available for teleconferencing."

The advantage of the claimed invention is that the login-location information "allows the Collaboration Initiator to find collaboration participants no matter where they are located."[10]

This mechanism differs substantially from telephone systems (and, for that matter, from the primary reference) where one has to know and dial a telephone number to establish communications. Those telephone systems use that dialed number to route the phone call to a fixed, predetermined endpoint and do so whether or not the intended recipient is at that endpoint.

B. **Claims 1 and 35: Graphic user interface (GUI); "not logged-in" notification; real-time text; and video images.**

Claims 1 and 35 include a further feature, an example of which is illustrated in Figure 22[11] reproduced below. In claims 1 and 35, computer software causes graphical icons representing users to be displayed on a calling user's communication device's display. These icons are displayed in a personalized list.[12] Having a list of graphical icons in a personalized list allows for easier user identification and facilitates communication tremendously, especially where a calling user has many potential callees from which to choose.

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9 See application's specification paragraph [0128].
10 See application's specification paragraph [0134].
11 See description at paragraph [0138] of application's specification.
12 See application's specification paragraph [0125] ". . . to select a participant from the system rolodex or a personalized rolodex . . ." (emphasis added).

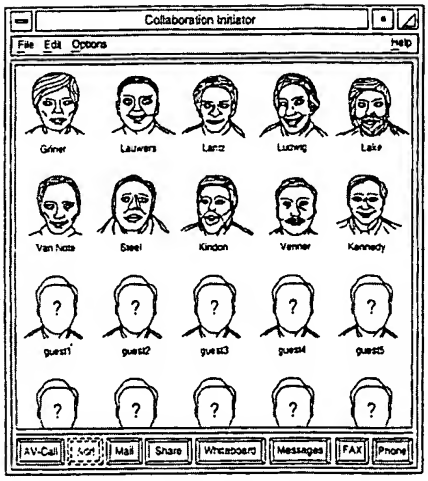


FIGURE 22

To initiate communication, the calling user selects a displayed user icon representing a to-be-called user; appropriate addressing information is retrieved for the selected user, and a connection between the called and calling users is established.[13] This enables real-time communication, which, as described in the specification, could be video, audio, or data conferencing communication or a combination.[14] As is apparent from the specification, data conferencing communication can include real-time exchange of graphics, text or both.

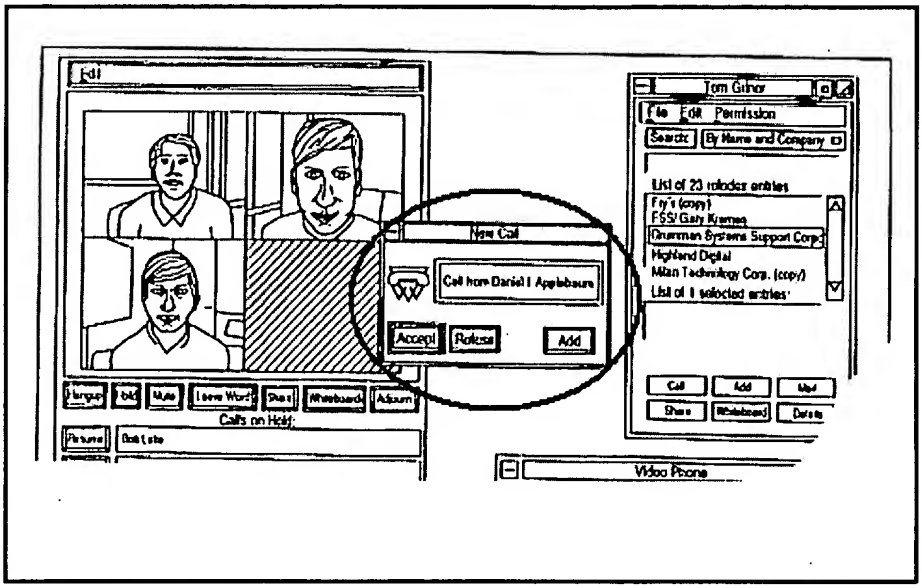
Claims 1 and 35 are further limited to situations where a calling user is given an indication of whether the called user is not logged-in. Additionally, claims 1 and 35 communication between users includes at least real-time text.[15] Claim 1 further includes video images in the communication. [16]

C. Claim 25: Calling in notification and video images.

In addition to the common features of the claims, independent claim 25 makes provision for notifying a user automatically of an attempt by another user to initiate a communication with

13 See description at paragraphs [0138] to [0140]..
14 See for example: [0123] ". . . Information is also sent from the Collaboration Initiator to the AVNM indicating the location of the user, the types of services available on that workstation (e.g., videoconferencing, data conferencing, telephony, etc.) and other relevant initialization information."
15 Text-based messaging is taught at paragraph [0270] "...using . . . the TEXT button, which permits typed characters to be displayed. . . ."
16 See for example: [0123] ". . . Information is also sent from the Collaboration Initiator to the AVNM indicating the location of the user, the types of services available on that workstation (e.g., videoconferencing, data conferencing, telephony, etc.) and other relevant initialization information."

the notified user. The notified user is then allowed to accept the incoming call and establish communication with the other user. This functionality is shown in the center of the top half of Figure 2A, part of which is reproduced and annotated below[17].



Additionally, in this claim, communication between users includes at least video images.

D. **Claims 12 and 35: Wireless devices.**

Independent claims 12 and 35 are limited to situations in which at least one device is a wireless device.[18] Claim 12 specifically calls for a wireless mobile phone device.

VI. GROUNDS OF REJECTION PRESENTED FOR REVIEW

Examiner Dinh has rejected the claims under 35 U.S.C. 103 as well as under the judicially created doctrine of double patenting.

A. **The § 103 Rejections of Claims 1-4, 8-12, 14, 16-35 and 39-50.**

17 See also the "use scenario" described at paragraphs [0271] and [0280].
18 See, for example, paragraph [0270] "Although Mexican caller 272 is outdoors and has no direct access to any wired telephone connection, his laptop has two wireless modems permitting dial-up access to two data connections in the nearest field office (through which his calls were routed). . . . It is important to note that, despite the limited capabilities of the wireless laptop equipment, the present invention accommodates such capabilities, supplementing an audio telephone connection with limited (i.e., relatively slow) one-way video and data conferencing functionality. As telephony and video compression technologies improve, the present invention will accommodate such improvements automatically."

The §103 rejections, based on a combination of at least 3 references, are as follows:

> "Claims 1-4, 8-12, 14, 16-35, 39-50 are rejected under 35 U.S.C. 103(a) as being unpatentable over Michael Banks "America Online: A Graphics Based Success Evaluation", and further in view of Baumgartner et al. US patent 5,195,086, and Marshak "Beyond Mail for Windows" and Kamerman et al. US patent 5,519,834, Vin et al. "Multimedia Conferencing in the Etherphone Environment".

As is apparent from the details of the Office Action, Examiner Dinh relies on Banks to teach, amongst other features, a service record including user log-in location information. Examiner Dinh then relies on Baumgartner to teach "displaying ... identifiers with graphical icons" of users to be called, and Marshak to teach private directories. Examiner Dinh also layers on Vin for notifying users automatically of an incoming call and additionally Kamerman to teach wireless communications.

For the purposes of this Appeal, and without admission as to the appropriateness of the others raised by Examiner Dinh, Appellants will address the following rejections specifically:

1. **Reliance on Banks for teaching the claimed user location tracking functionality.**

Examiner Dinh alleges that Banks inherently discloses "maintaining service records . . . including user identification (screen names) and location information ... [inherent that AOL system must kept some type of location information such as address, port number, and/or other indicia in order for AOL system to transmit data to the user terminal) [sic]."[19]

2. **Reliance on Baumgartner for teaching the claimed user identifying graphical icons.**

Examiner Dinh then added the Baumgartner reference because "Banks does not specifically disclose . . . displaying user identifiers with graphical icons for selection by the first user to establish a communication."

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19 Office Action, dated February 6, 2006, page 5, lines 13-16.

In doing so, Examiner Dinh argued that "it would have been obvious for one of ordinary skill in the art to combine the teaching of Baumgartner with AOL system... to display user name along with graphical icons because it would have enabled... the user to visually associate member with the icon and provided graphical means of selecting the participants for conferencing."

B. **The Double Patenting Rejection of Claims 1-50.**

Examiner Dinh also rejected the pending claims based on the judicially created doctrine of double patenting, based on co-pending, co-owned applications, as follows:

> Claims 1-50 are provisionally rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims 1-36 of Application No. 10/722,051, claims 1-37 of Application No. 10/721,343, claims 1-50 of Application 10/721,385. Although the conflicting claims are not identical, they are not patentably distinct from each other because they recite substantially equivalent limitations or obvious variation thereof. This is a provisional rejection because the claims are not in fact patented.

Specifically, Examiner Dinh argued that the only difference between the '385/'905 application pair and the '051 application "is the phrase 'no matter where the user is located' and that this "feature is inherent from the use of the service record in claim 1 of the '385/'905 applications."[20] In addition, Examiner Dinh argued that:

> Regarding claim 1 of the '345 (10/721,343) application, the claim was amended to recite a quick dial list created from a list of all users. This language is not present in claims 1 of the '385/'905 and '051. However, the 'quick dial' list is equivalent to the 'personalized list' recited in the '385/'905 and '051 applications. Populating a personalized list using data from a master list clearly would have been obvious to one of ordinary skill in the art. Hence, claim 1 of '345 is not patentably distinct from claims 1 of '385/'905 and '051.[21]

20 Office Action dated February 9, 2006, page 2, lines 12-15.
21 Page 2 line 16 to page 3 line 2.

VII. ARGUMENTS

In response, Appellants submit that these rejections cannot be sustained for, at least, the following reasons:

A. First, the combined references simply do not teach all claim elements. Specifically, neither Banks nor any other reference teaches a service record that includes user login location information. Nor do the references teach selecting a user identifier in a personalized list to establish communications automatically.

B. Second, it is improper and cannot be shown to be obvious to combine the references as suggested by the Examiner. This is because:

- The proposed modifications to Banks by adding Baumgartner's user identifying icons would render Banks unsatisfactory for its intended purpose. Thus, there can be no motivation to modify Banks by adding Baumgartner's user icons and, therefore, it cannot be obvious to combine these two references.

- Moreover, Examiner Dinh has ignored the fact that the references are from unrelated and non-analogous computer art areas and, therefore, their combination is improper.

- In addition, history teaches that those skilled in the art of the invention would not have found obvious the Banks/Baumgartner combination suggested by Examiner Dinh.

C. Third, there are patentably distinct differences between this application and at least the '385 application on which the double patenting rejection is based.

Each of these points is explored below.

A. The combined references do not teach all claim limitations.

1. Established Principle: All claim limitations must be taught.

Case law requires that to "establish *prima facie* obviousness of a claimed invention, all the claim limitations must be taught or suggested by the prior art."[22] On this ground alone the combination of references is deficient. This is because at least one limitation is not taught. Specifically, in contrast to independent claims 1, 12, 25, and 35, Banks does not teach or suggest a service record including a user's location.

a. With respect to Claims 1, 12, 25, and 35, neither Banks nor any other reference teach maintaining a record of the user's login location.

As set out above, all the claims are limited to a service record of the location at which a user has logged in. This is clear from the claim language itself[23]. Despite Examiner Dinh's contention to the contrary, primary reference Banks does not teach this at all. Neither does any other reference.

Banks describes the 1992 version of the AOL system. The system is illustrated schematically in Figure 1, below.

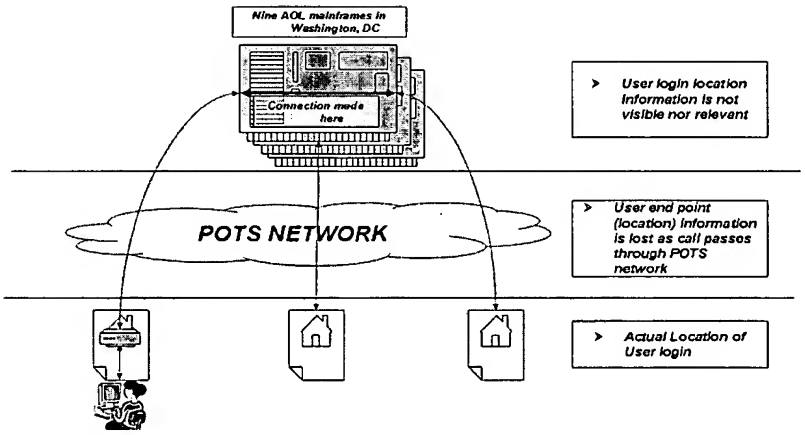

Figure 1: Banks system

22 *In re Royka*, 490 F.2d 981, 180 USPQ 580 (CCPA 1974) as cited at MPEP 2143.03.
23 Claims 1 and 35 refer to maintaining "an associated location where the first and second users are logged-in." Similarly, claims 12 and 25 refer to maintaining "an associated location where the first and second users are logged-in no matter where they are located."

In this system, members logged-in at their home computers and connected to a centralized mainframe, remote from their homes, by using dial-up modems. Each connection was a single, continuously open, telephone communication-line between the member and the remote mainframe. All AOL members had to dial in to the same place[24], where the mainframe(s) was/were housed, to establish communications. Once dialed in, inter-member connections were made at the mainframe at that single destination.[25]

Importantly, in the AOL system, once the user connected to the mainframe through the telephone (POTS) network, the user's actual physical location information became invisible to in-called modems at the mainframe. Thus, for example, the mainframe could not re-establish connection with the user's modem in the event the connection was broken, and under those circumstances it would be up to the user to call back in to the mainframe. *Thus, the mainframe simply did not keep a record of the user's location information and there is no way Banks could possibly teach this claim element.*

It follows therefore that there was no need for the Banks system to keep track of information relating to a member's login location. Nor does Banks even hint at this possibility. This is because, once members dial into the mainframe, connections between members are made purely with the mainframe environment, which, as shown above, is blind to user locations.

This is further illustrated by Figure 2, below, which shows what happens when two users set up communications with each other at two different times. Here, it is important to note that the user's actual location does not change, but the port addresses at which the users connect do change.

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24 This configuration is confirmed by pages 5 to 6 of the "America Online Tour Guide" manual submitted under IDS. For example, the "Tour Guide" describes AOL as:

'a vast network of "members," each of whom uses a computer, a modem and a telephone line to connect with a *common destination* - to go online . . ."

25 This configuration is confirmed by pages 5 to 6 of the "America Online Tour Guide" manual submitted under IDS. For example, the "Tour Guide" describes AOL as:

'a vast network of "members," each of whom uses a computer, a modem and a telephone line to connect with a *common destination* - to go online . . ." Simultaneously coordinating thousands of phone calls and storing tens of thousands of files require one Thunder-Lizard of a computer . . .' (emphasis added).

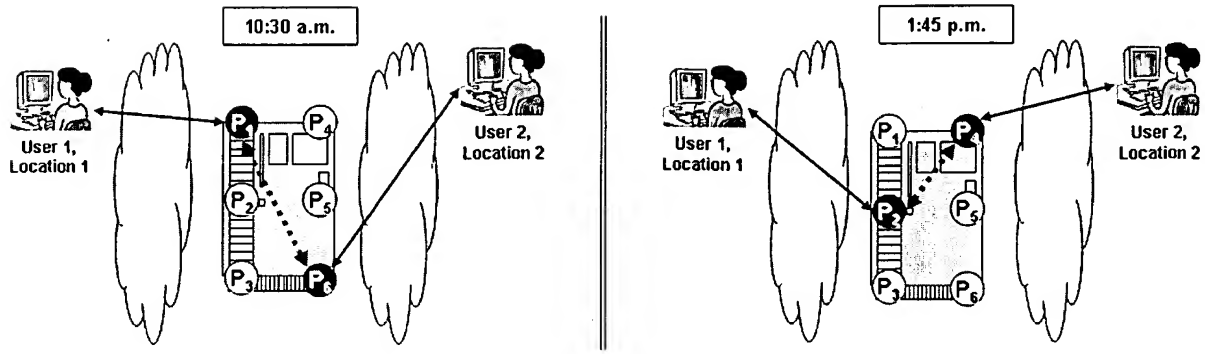


Figure 2: Banks reference: Two users, same locations, connecting to different mainframe ports at different times

From this figure it is absolutely apparent that Banks never kept a record of the user's location. Banks may have kept a record of the ports (P_1 and P_6 at 10.30 a.m. and P_2 and P_4 at 1.45 p.m.) to which the users 1 and 2 are connected at the respective times, but nothing more. Thus, even if a "service record" or an equivalent existed in Banks, it would at most have contained information to make connections within the mainframe. This is simply not information about a user's remote location.

In stark contrast, the claimed invention illustrated in Figure 3 below, keeps a record of the callee's actual log-in location.[26]. In a parallel structure with Figure 2, Figure 3 two users are shown connecting with each other at different times:

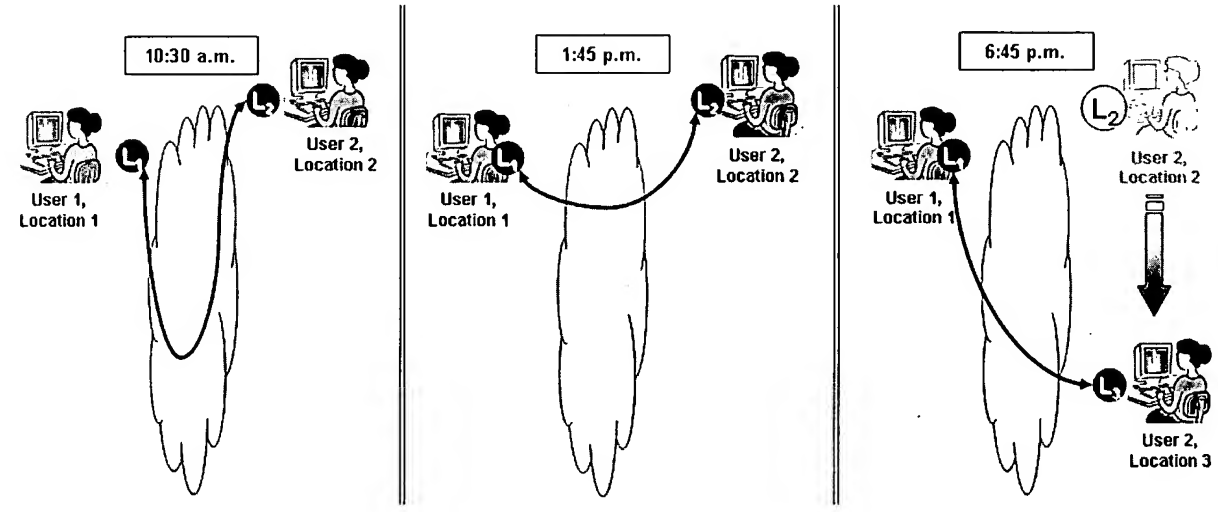


Figure 3: Claimed invention: Two users, same locations; then one user at a different location

26 See application's specification paragraph [0143] "...the AVNM sets up the necessary communication paths between the caller and the callee required to establish the call."

At the first two times (10:30 a.m. and 1:45 p.m.) and in a manner that clearly distinguishes the Banks reference, the system keeps a record of the user's respective log-in locations (L_1 and L_2). This location does not change in the first two time slots. Thus, the claimed system records the same location. When user 2 moves to a third location (L_3), the system records that as user 2's login location.

Applicants therefore submit that Banks does not teach tracking a user's location as demonstrated above.

Despite this clear distinction, Examiner Dinh argues in the February 6, 2006 Office Action that Banks' system "maintaining service records . . . including user identification (screen names) and location information ... [inherent that AOL system must kept some type of location information such as address, port number, and/or other indicia in order for AOL system to transmit data to the user terminal) [sic]."[27]

MPEP §2112(IV) states that "[t]o establish inherency, the extrinsic evidence 'must make clear that the missing descriptive matter is necessarily present in the thing described in the reference, and that it would be so recognized by persons of ordinary skill. Inherency, however, may not be established by probabilities or possibilities. The mere fact that a certain thing may result from a given set of circumstances is not sufficient.'" (Citing *In re Robertson*, 169 F.3d 743, 745, 49 USPQ2d 1949, 1950-51 (Fed. Cir. 1999)). (Emphasis added.) Examiner Dinh's premise that Banks must inherently teach tracking location information of the user because AOL's system needs the location information to transmit data to the user terminal is completely unfounded based on the explanation above.

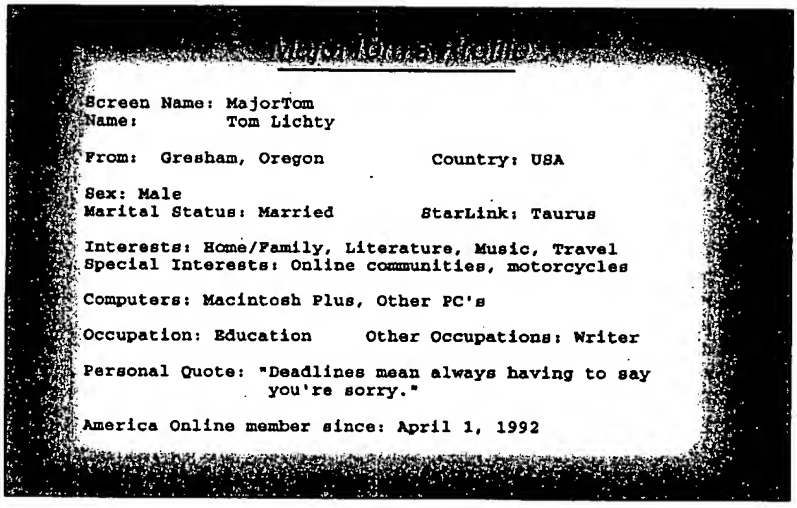
More specifically, as described above, a user connects to AOL's mainframe via telephone modem. When the user connects to the mainframe, the user is assigned a port number. The communication between the users is routed based on the assigned port number, not based on the users' locations. As explained above, because AOL's mainframe routes communications between users based on assigned port information, where the user is located is irrelevant as long as the users' dial-up modem remains connected to the assigned port. Hence, maintaining login location information of a user is neither inherent nor suggested by Banks. To the contrary,

Banks completely teaches away from having to keep such a record as all communications are routed based on assigned port information, which has no correlation to the users' login location as explained above.

If the Examiner's allegation is stemming from the "where a member is from" language found in Banks' reference (page 3, first paragraph), a closer inspection of this section reveals that this has nothing to do with maintaining information about a user's login location. The "where a member is from" language in Banks refers to demographic information. It is the town, state, or other geographic place from which the member hails, not the member's log-in location. In fact, a member could quite possibly be logged-in at a place very different from "where the member is from." Nothing here could be used to establish communications with the user.

Documents published at the same time as the Banks reference confirm this exactly. A pertinent example is from the "America Online Tour Guide" (the "Guide"), sections of which were previously submitted under IDS. Pages 70 to 72 from the Guide show clearly that the reference to "where a member is from" in fact refers to a bibliographic location. For example, Figure 3-16 (reproduced below) on page 72 shows that member Major Tom is "from" Gresham, Oregon.

Figure 3-16: MajorTom's profile reveals all of my secrets.



27 Office Action dated February 6, 2006, page 5, lines 13-16.

Obviously, this is not the location where the user is logged-in as claimed and cannot be used to establish a connection.

Despite these facts, and even after an interview on April 11, 2006, Examiner Dinh still maintained that Banks kept track of a user's location. In the Interview Summary, Examiner Dinh stated that "'location' is a logical designation that reads on client connection, port or address."[28] Thus, Examiner Dinh seemed to argue that a record (at best implied by Banks) of a dial-in connection point at the mainframe is the same as the claims' limitation to a service record including the location where the user logs in.

Alternatively put, Examiner Dinh argued that a destination (location of the mainframe) hundreds or thousands of miles from the user is the same as the user's actual location. Appellants cannot agree with Examiner Dinh's proposition.

First, Examiner Dinh's proposition contradicts the claim language, which is limited to situations where a record is kept of the user's login location.

Second, Examiner Dinh's interpretation does not comport with the plain English meaning of the word "location." Location is, for example, defined variously as:

1. "A place where something is or could be located; a site." *www.dictionary.com*

2. "a place or position." *Cambridge Dictionaries on line.*

3. "a position or site occupied or available for occupancy or marked by some distinguishing feature." *Merriam-Webster Online Dictionary.*

From these definitions it is clear that the word "location" relates to a physical place, position or site, which, as claimed, is occupied by the user or the device at which the user logs in. This is simply not the same as some distant connection point at a mainframe as Examiner Dinh maintained.

28 Interview Summary, April 11, 2006.

Third, and as pointed out above, the specification is replete with terms specifically showing that the word "location" in the claims means the actual location where the user logs in. Two of these are repeated below.

- "[0123]... Information is also sent from the Collaboration Initiator to the AVNM indicating the **location of the user**, the types of services available on that workstation (e.g., videoconferencing, data conferencing, telephony, etc.) and other relevant initialization information." (Emphasis added.)

- "[0128]... For real-time sessions, the Collaboration Initiator queries the Service Server module 69 inside AVNM 63 for the **current location** of the specified participants. Using this **location** information, it communicates (via the AVNM) with the Collaboration Initiators of the other session participants to coordinate session setup." (Emphasis added.)

Clearly therefore, the claim language, the plain English meaning of the term location, and the teaching of the specification show that the word location in the claims means the actual location where the user logs in, not a connection inside a mainframe remote from the user.

Appellants therefore submit that Examiner Dinh's position is artificial, inconsistent with the specification, and the meaning of the claims cannot be sustained. Banks does not teach a service record that includes information about a user's log-in location.

On this ground alone, all the claims should be allowed.

b. **With respect to Claims 1, 12, 25, and 35, neither Banks nor Baumgartner teach selecting a user's displayed identifier to establish communication directly and without numerous other user steps.**

Additionally, the independent claims 1, 12, 25, and 35 are limited to situations where a calling user can select a displayed user identifier that represents a user "to be called." In response, the claimed system retrieves addressing information for the selected user and causes a connection to be established between the calling and the selected user.

Banks does not teach selecting a user identifier. Banks is, in fact, silent on how the "instant messages"[29] (referred to by the Examiner) are directed to recipients. But the "America Online Tour Guide" describes how this was done in the AOL system. Specifically, the Guide states "[t]o send an Instant Message.... Enter the recipient's screen name once."[30] (Emphasis added.) Thus, Banks does not teach selecting a user identifier for real-time communication. Instead, Banks requires user identifier information to be typed in alphanumerically.

The Examiner may wish to argue that Baumgartner does, however, teach "selecting" a user identifier. Even if it could be shown to teach "selecting," Baumgartner does not teach that this causes the setting up of the real-time communication as claimed. In contrast to the claimed invention, setting up a communication in Baumgartner requires numerous, sequential, human actions:

- First, an originating user wishing to establish communications in the Baumgartner system must create a conference room[31].
- The originating user next "puts" other potential conferees into the room using a second subsequent action. This second action is done by selecting a user icon[32], and results only in establishing a precursory "virtual circuit"[33] connection, not a

29 The only 'real-time' communications in Banks.
30 First full paragraph, p. 247.
31 US 5,195,086, col. 18, lines 51 to 52.
32 US 5,195,086, col. 18, lines 60 to 62.
33 US 5,195,086, col. 18, lines 62-65.

completed real-time communication[34]. For that to occur, Baumgartner requires separate, additional third and fourth actions, described below.

- Then and only "after the call has been established" with only the "virtual circuit" can the originating user "add applications to the room."[35] It is these applications that are used to establish communication. By convention, the first such application to be added is a phone, which is "initially on hook." So, even at this point, there is no real-time communications.

- Finally, and only when a user takes the phone off hook by selecting its icon, is real-time communication established.[36]

Thus, selecting a user icon is but one step that eventually leads to communication in Baumgartner. It requires at least three additional user-initiated steps to establish the claimed real-time communications.

Accordingly, neither Banks nor Baumgartner teach the claimed user identifier selection to establish real-time communications and, as pointed out earlier, no reference teaches maintaining a record of the location of a user's login.

Thus, even if the references could be combined, in claims 1, 12, 25, and 35, the element of selecting a user's displayed identifier to establish communication directly and without numerous other user steps are not taught. On at least this ground, all the claims must be allowed.

c. **With respect to Claim 25, Vin does not teach notification of an attempt and identity of a user to communicate.**

Claim 25 includes the following feature in the context of an attempt by a user to initiate a communication with the first user:

"notifying the second user of the attempt by a first user and of the first user's identity."

34 Col. 19, lines 10-13.
35 US 5,195,086, col. 19, lines 14 to 15.
36 US 5,195,086, col. 19, lines 21 to 28.

In the Office Action, Examiner Dinh takes Official Notice that it is well known in the communication art to provide notification and identification of a caller (e.g., a phone ring and caller ID) and alleges that Vin teaches automatic notification of attempts to communicate. Appellants respectfully disagree. Col. 1 of page 77 of Vin discloses that a "busy signal" is given to the user. Thus, Vin implies that the first user (i.e., calling user) receives a busy signal when the first user attempts to communicate with the second user. Thus, Appellants submit that Vin teaches exactly the opposite of notifying the second user (i.e., the user being called) when the first user attempts to communicate with the second user, as required by the claim.

Moreover, as further discussed below, the Official Notice is non-analogous to the claimed invention. That is to say, caller ID at the time of the invention was only available over the POTS network. How or why one would modify the AOL network to include caller ID on the users' computer when the computer is connected to the mainframe is nebulous at best, especially when the users' communications are routed within the mainframe and not over the POTS network as explained above.

Thus, even if the references could be combined, all the elements of the claim 25 are not taught. On at least this ground, claim 25 and the all the claims that depend from claim 25, either directly or indirectly, should be allowed.

B. **It is not obvious to combine the references as suggested by Examiner Dinh.**

1. **Established Principle: there can be no motivation to combine if the combination renders the prior art unsatisfactory for its intended purpose.**

It is undeniable that to establish a *prima facie* case for obviousness, an Examiner must show a suggestion or motivation to combine the references.[37] Further, it is also established law that there can be no such suggestion or motivation if a proposed combination "would render the prior art invention being modified unsatisfactory for its intended purpose."[38]

37 Discussed at length at MPEP 2142.
38 *In re Gordon*, 733 F.2d 900, 221 USPQ 1125 (Fed. Cir. 1984) cited at MPEP 2143.01(V).

As will be demonstrated, the Banks reference shows that combining elements selected by Examiner Dinh, from Baumgartner, with Banks would render unsatisfactory the Banks system. Thus, the required motivation or suggestion to combine Baumgartner with Banks cannot be shown.

a. **Baumgartner's graphical user interfaces (e.g., Claims 1 and 35) and video images (e.g., Claims 1 and 25) would cripple Banks' system.**

Examiner Dinh has suggested a combination of Baumgartner's graphical user icons and video conferencing with the Banks system. But, this combination would cripple the Banks system because the Banks system could not, on its face, accommodate the selected Baumgartner user interface components or the video images.

Banks refers specifically to the challenges presented by its graphical user interface. For example, Banks states "AOL places a substantial portion of the services on the disk which is necessary because it is so graphics intensive."[39] This is necessary to speed up the AOL service because, as Banks notes, "without this twist, things would be *hopelessly slow*."[40] (Emphasis added.) Even so, this approach does come at a cost for the user's PC. This cost is recognized by Banks when he says the "bit-mapped graphics ... have some hardware and software implications. Basically, graphics are faster and look better on high-end equipment..."[41] In effect, Banks teaches that even the limited amount of graphics in the AOL system works notably better with high-end equipment, something few AOL users of the day would have had.

With these challenges in mind, it is worth noting that, at the filing date of this application, it is likely that the AOL service had more than 200,000 users. This number is as referenced in the Preface of the America Online Tour Guide, also submitted previously by way of IDS.

Given the number of AOL users and the limitations on graphics as described in Banks, it is evident that using the graphical icons of Baumgartner in a user directory and video streaming would not be possible in the AOL system. Baumgartner explicitly requires the display of the icon of every user reachable from Baumgartner's workstation.[42] Such a requirement would

39 Banks, page 12, col. 1, lines 55-57.
40 Banks, page 12, col. 1, lines 62-64.
41 Banks, page 12, col. 1, lines 65-70.
42 "[W]hen the directory button is selected, UI will display a directory which contains face icons (Fig. 18)

burden the Banks system beyond the point of crippling. Alternatively, Baumgartner's icons for over 200,000 users would have to be stored either centrally (making the system "hopelessly slow") or they would have to be stored locally at the user's home computer. In 1992, home computers had limited storage and storing icons of over 200,000 users simply could not be done without significant "hardware and software implications" well beyond AOL users' means. Moreover, given that simple graphical representations were a burden on AOL's network, it would be beyond AOL's capability to support video streaming of Baumgartner's video conferencing feature.

Thus, even if it were possible to do so, any proposed combination of Baumgartner's graphical user interface and video conferencing feature with the Banks system would render Banks system hopelessly unsatisfactory for its intended purpose.

Alternatively, the use of Baumgartner's graphical user interface in the Banks system would change entirely the basic principles of operation in the Banks system. This change by storing graphics at the mainframe, for example, runs afoul of the rule that if "the proposed modification or combination of the prior art would change the principle of operation of the prior art invention being modified, then the teachings of the references are not sufficient to render the claims *prima facie* obvious."[43]

Accordingly, despite Examiner Dinh's reference to graphical user interfaces and video images mentioned in Banks and Baumgartner, such a reference is not enough to establish a *prima facie* case for obviousness. One simply cannot show the mandated "suggestion or motivation to combine" prior art in situations where the combination would render Banks unsatisfactory for its intended purpose.

2. **Established Principle: References must be analogous prior art.**

Moreover, it is well established that "in order to rely on a reference as a basis for rejection of an applicant's invention, the reference must either be in the field of applicant's endeavor or, if not, then be reasonably pertinent to the particular problem with which the

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representing all of the people that can be reached from this workstation." (Emphasis added.) Col. 18, line 55-60.
43 MPEP 2143.01(VI).

inventor was concerned."[44] As demonstrated below, the combination of Banks and Baumgartner runs afoul of this requirement as well.

a. **Banks and Baumgartner are non-analogous.**

In the Office Action, Examiner Dinh argued that it would have been obvious to combine primary reference Banks with elements from secondary reference Baumgartner. But, as explained below, it is improper to make such combinations. At the time of the invention, Banks and Baumgartner were from completely unrelated non-analogous computer art areas.

In particular, Banks teaches a consumer-centric, on-line service provider (AOL) almost exclusively dedicated to providing information "organized into seven categories: Computing & Software, Entertainment, News & Finance, Lifestyle & Interests, Learning and Reference, Travel & Shopping and What's New/Online Support."[45] It also has an e-mail (non-real time) system and a number of "real-time" conference areas, referred to as 'rooms' and 'auditoriums.'[46] Despite this nod to real-time communications, the primary purpose of the Banks' system at the time of this application's invention was to provide users with information.

This information was accessed using a dial-up, 2,400 or 4,800 bps modem.[47] Real-time communications were limited to messages of "a several dozen words or more"[48] or bulletin board "conference areas."[49] This is because information exchange in the Banks system was through extremely low bandwidth connections. See for example Banks' reference to a weather map taking 75 seconds to download using a 2,400 bps modem![50] In the AOL system, the users' computers are low-performance computers designed to run only simple-threaded application software and are designed for modem based networking.

Baumgartner, on the other hand, is a totally different system directed to a very different purpose employing entirely different design traditions. Specifically, it is a LAN-based, business-environment directed, audio and videoconferencing system. It does not teach a technology that

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44 *In re Oetiker*, 977 F.2d 1443, 1446, 24 USPQ2d 1443, 1445 (Fed. Cir. 1992) as cited in MPEP 2141.01(a)(I).
45 Banks, page 14, col. 1, lines 7-12.
46 Banks, page 14, col. 1, line 23 to col. 2, line 1.
47 Implied because the "What's next" section refers to a 9,600 bps modem as a development that is still to come.
48 Banks, page 14, col. 2, line 1-3.
49 Banks, page 14, col. 1, line 23-24.
50 Banks, page 14, col. 4, lines 29-30.

would or could have been used by an Online Service Provider (AOL taught by Banks). Thus, despite being computer-based, the Banks and the Baumgartner systems function very differently. One is a bandwidth-impaired, dial-up content delivery-centric, online service provider, the other a high-bandwidth, LAN-based communications system.

In addition to coming from different application areas, these references come from very different technological settings as well. For example, the digital audio component of Baumgartner's conferencing system could not have been compatible or combinable with Banks' modem-based system due to bandwidth constraints imposed by the dial-up link and modem rates of the day. Moreover, Baumgartner's system is built on top of a multicast packet-switching network, which uses fast packet technology to enable high-bandwidth applications, such as the interactive multimedia conferencing,[51] and is implemented on a small cluster of X-Windows based workstations. In contrast, when Banks was published in 1992 and for years thereafter, AOL users connected to the AOL mainframe server from their personal computers (PCs) via telephone modems over a telephone network and, in rare cases, very low-bandwidth digital networks such as TymNet or SprintNet.

As another point, there are seriously disjointing differences between the Banks and Baumgartner user endpoint technologies which make Banks and Baumgartner non-analogous pieces of prior art. In the early 90's, mainframe workstations and PCs were not only different in terms of computing power and costs, but also operated on completely different underlying operating systems. Baumgartner's system required multi-threaded execution that was provided by UNIX-based workstations. In contrast, the PCs referred to in Banks were all single-threaded MS-DOS, IBM-PS/1, Macintosh, and Apple II based. At the time of this application's priority date and for many years thereafter, these systems, as represented by the Baumgartner system and the Banks system, were totally unrelated and non-analogous and, in fact, shared almost no applications in common. Further, workstation software would not run on PC's or vice versa. One would not go to workstation art to seek solutions for consumer-centric PC applications and vice versa.

b. **Official Notice of telephone caller ID is non-analogous.**

51 Baumgartner, col. 4, lines 32-57.

The Official Notice taken that caller ID on telephones is old and well known is also non-analogous to Banks and Baumgartner. As briefly explained above, caller ID on a telephone at the time of the invention was implemented on the POTS network between telephone calls that were routed through the telephone switching network. Banks and Baumgartner are both directed to computer-to-computer communications. The only POTS network involved comes from the user's computer having to connect to the computer network via dial-up modem. However, once the user's computer is connected to the mainframe, all routing of communication occurs through the mainframe, not through the telephone switches.

Thus, Appellants submit that Banks, Baumgartner, the Official Notice are not even remotely analogous. *Prima facie* obviousness cannot, therefore, be established and for this reason too, the claims should be allowed.

3. **Established principle: The combination must be obvious to those skilled in the art.**

Finally, to establish obviousness it must be demonstrated that the proposed combination must be obvious to someone skilled in the art at the time of the invention.[52] Importantly, "references which do not qualify as prior art because they postdate the claimed invention may be relied upon to show the level of ordinary skill in the art at or around the time the invention was made."[53]

a. **History shows that a Banks/Baumgartner combination would not have been obvious.**

In this regard, Examiner Dinh has argued that it is obvious to combine Banks' "Instant Messaging" feature with Baumgartner's graphical user identifiers. Appellants have demonstrated above why this would not have been obvious.

Moreover, this lack of obviousness to one skilled in the art is not a mere matter of conjecture. As proof, an extract from a highly researched graduate thesis (the Salin Thesis)

52 Supreme Court in *Graham v. John Deere*, 383 U.S. 1, 148 USPQ 459 (1966).
53 *Ex parte Erlich*, 22 USPQ 1463 (Bd. Pat. App. & Inter. 1992) as cited at MPEP 2141.03.

demonstrating the level of ordinary skill in the art and describing the development of Instant messaging,[54] has previously been submitted in an IDS.

In the Salin Thesis, the author makes the following historical observation about instant messaging and the use of graphical user icons – the allegedly "obvious" combination: "ICQ..., created in 1996...is considered the ancestor of instant messaging systems. ICQ *introduced* concepts like buddy lists..."[55] (emphasis added).

The ICQ developers were clearly "skilled in the art" of instant messaging. In addition, they must have been highly motivated by the market place to produce solutions. Yet, skilled and motivated as they were, they did not make the combination of Banks' system and Baumgartner's icons (i.e., the "buddy list" with instant messaging referred to in the Salin Thesis) until as early as 1996, at least two years after the effective filing date of this application.

Simply put, it cannot have been obvious for one skilled in the art to make the Banks plus selective parts of Baumgartner combination in late 1993.

b. **No evidence that the Banks/Baumgartner/caller ID combination would not have been obvious.**

As discussed above, at the time of the invention, telephone caller IDs were only available over the POTS network. As Banks and Baumgartner are both directed to computer-to-computer communication over a computer network, merely suggesting that caller ID is well known does not establish that one with ordinary skill in the art at the time of the invention would have the knowledge or the motivation to modify the telephone caller ID for computer communication notifications. Accordingly, such baseless allegations can only result from reconstruction based on Appellants' own teachings, i.e., improper hindsight.

54 Peter Salin, "Mobile instant Messaging Systems – A Comparative Study and Implementations," Master's Thesis, September 21, 2004.
55 Salin, section 2.4.1, page 10.

C. **There are substantial differences between the applications on which the double patenting rejection is based.**

As indicated above, Examiner Dinh has provisionally rejected this application on double patenting grounds. In response, Appellants point out that this application is in fact patentably distinct from at least applications, 10/721,385 and 10/721,343. Both applications have been amended to include limitations to registering a user's service capabilities and establishing communications based on the registered capabilities. In addition, the '385 application is limited to multiple servers and multiple instances of the service record including the user's log-in location. These limitations are not present in the claims of the '905 application. Thus, these two applications are clearly distinct from the '905 application.

Accordingly, it is submitted that the double patenting rejection cannot be sustained for at least the '385 application.

D. **Conclusion**

In summary, Appellants submit that they have demonstrated that the §103 rejections cannot be sustained because the combination of references does not teach at least two claim limitations in all of the pending claims 1-4, 8-12, 14, 16-35 and 39-50. In addition, adding Examiner Dinh selected secondary reference features to the primary reference would cripple the primary reference and render it unsuitable for its primary purpose. Thus, the mandated showing of motivation to combine references cannot be met. Moreover, the primary and secondary references are non-analogous art and, therefore, their combination is improper. Further, it has been demonstrated that history teaches that those skilled in the art of the invention would not have found obvious the combination suggested by Examiner Dinh. Finally, the double patenting rejection is no longer appropriate with respect to application 10/721,385 because the claims of this application are different from those of the '385 application.

In view of the foregoing, Appellants respectfully request the reversal of Examiner Dinh's rejections and allowance of the pending claims 1-4, 8-12, 14, 16-35 and 39-50. If there are any other fees due in connection with the filing of this Brief, please charge the fees to our Deposit Account No. 50-0310 (order no. 063330-5008-US).

If a fee is required for an extension of time under 37 C.F.R. § 1.136 not accounted for above, such an extension is requested and the fee should also be charged to our deposit account.

Respectfully submitted,

MORGAN, LEWIS & BOCKIUS LLP

Dated: December 18, 2006

By: _____
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VIII. Claims Appendix

CLAIMS CURRENTLY ON APPEAL ORDERED BY NUMBER

1. A method of real-time communication between a plurality of users each with respective communication devices having associated displays, the method comprising:

(a) providing each of the plurality of users with collaboration initiation software at their communication devices;

(b) allowing at least first and second users to connect to at least one communication network by logging in at their respective communication devices;

(c) maintaining service records for at least the first and second logged in users, the service records including user identification information and an associated location where the first and second users are logged in;

(d) causing display of a user identifier for at least the second user in a personalized list including graphical icons representing at least one user on the display of at least a first user's communication device;

(e) allowing the first user to select the displayed second user's identifier;

(f) retrieving necessary addressing information of the second user;

(g) indicating to the first user whether another user is not logged in.

(h) establishing a connection between the first and second users, thereby enabling real-time communication including video images of at least one user and real-time text displayed on the display associated with at least one user.

2. The method of claim 1, wherein the service records further include a location where the first and second users are logged in no matter where they are located.

3. The method of claim 1, wherein at least one communication device is a wireless device.

4. The method of claim 2, wherein the communication network is a wide area network.

5-7. (canceled).

8. The method of claim 1, further comprising allowing the first user to:

(a) select a new user from among a plurality of potential users; and

(b) add that new user to an existing communication.

9. The method of claim 3, further comprising:

(a) detecting an attempt by a third user to initiate a communication with the first user;

(b) notifying the first user of the attempt; and

(c) allowing the first user to establish a communication with the third user.

10. The method of claim 9, wherein an indication of the attempt to initiate communications appears automatically on a user's display.

11 The method of claim 4, further comprising

(a) allowing the first user to send an e-mail to the second user.

12. A method of real-time communication between a plurality of users each with respective communication devices having associated displays, the method comprising:

(a) providing each of the plurality of users with collaboration initiation software at their communication devices at least one of which is a wireless mobile phone device;

(b) allowing at least first and second users to connect to at least one communication network at least part of which is a wide area network by logging in at their respective communication devices;

(c) maintaining service records for at least the first and second logged in users, the service records including user identification information and an associated location where the first and second users are logged in no matter where they are located;

(d) causing display of a user identifier for at least the second user on the display of at least a first user's communication device;

(e) allowing the first user to select the displayed second user's identifier;

(f) retrieving necessary addressing information of the second user; and

(g) establishing a connection between the first and second users, thereby enabling real-time communication displayed on the display of the first and second users.

13. (canceled).

14. The method of claim 12, wherein the communication includes real-time text displayed on the displays associated with the first and second users.

15. (canceled).

16. The method of claim 14, wherein the user identifier is in a personalized list.

17. The method of claim 16, wherein the personalized list includes at least one graphical icon representing a user.

18. The method of claim 17, further comprising indicating to a user whether another user is not logged in.

19. The method of claim 14, further comprising allowing the first user to:

(a) select a new user from among a plurality of potential users; and

(b) add that new user to an existing communication.

20. The method of claim 19, wherein selecting a user is done by clicking on an icon.

21. The method of claim 14, further comprising:

(a) detecting an attempt by a third user to initiate a communication with the first user;

(b) notifying the first user of the attempt; and

(c) allowing the first user to establish a communication with the third user.

22. The method of claim 21, wherein an indication of the attempt to initiate communications appears automatically on a user's display.

23. The method of claim 18, further comprising

(a) allowing the first user to send an e-mail to the second user.

24. The method of claim 12, wherein the communications include video images of at least one user.

25. A method of real-time communication between a plurality of users each with respective communication devices having associated displays, the method comprising:

(a) providing each of the plurality of users with collaboration initiation software at their communication devices;

(b) allowing at least first and second users to connect to respective first and second communication networks by using their respective communication devices;

(c) maintaining service records for at least the first and second logged in users, the service records including user identification information and an associated location where the first and second users are logged in no matter where they are located;

(d) causing display of a user identifier for at least the second user on the display of at least a first user's communication device;

(e) allowing the first user to attempt to establish communication with the second user by selecting the displayed second user's identifier;

(f) retrieving necessary addressing information of the second user;

(g) notifying the second user of the attempt by the first user and of the first user's identity; and

(h) establishing a connection between the first and second users through at least their respective communications networks, thereby enabling communication displayed on the display of the first and second users, wherein the communication further includes video images of at least one user displayed on at least one other user's associated display.

26. The method of claim 25, wherein the communication includes real-time time text displayed on the displays associated with the first and second users.

27. The method of claim 26, wherein the user identifier is displayed in a list that includes graphical representations of users and is scrollable.

28. The method of claim 26, further comprising indicating to a user whether another user is not logged in.

29. The method of claim 25, wherein the communication includes video images of at least two users.

30. The method of claim 25, wherein at least one communication device is a wireless device.

31. The method of claim 25, further comprising at least one wide area network.

32. The method of claim 27, further comprising allowing the first user to:

(a) select a new user from among a plurality of potential users; and

(b) add that new user to an existing communication.

33. The method of claim 26, further comprising:

(a) detecting an attempt by a third user to initiate a communication with the first user;

(b) notifying the first user of the attempt; and

(c) allowing the first user to establish a communication with the third user.

34. The method of claim 33, wherein an indication of the attempt to initiate communications appears automatically on a user's display.

35. A method of real-time communication between a plurality of users each with respective communication devices having associated displays, the method comprising:

(a) providing each of the plurality of users with collaboration initiation software at their communication devices at least one of which is a wireless device;

(b) allowing at least first and second users to connect to at least one communication network by logging in at their respective communication devices;

(c) maintaining service records for at least the first and second logged in users, the service records including user identification information and an associated location where the first and second users are logged in;

(d) causing display of a user identifier in a personalized list including at least one graphical icon representing a user for at least the second user on the display of at least a first user's communication device;

(e) allowing the first user to select the displayed second user's identifier;

(f) retrieving necessary addressing information of the second user;

(g) indicating to the first user whether another user is not logged in;

(h) establishing a connection between the first and second users, thereby enabling real-time communication including real-time text displayed on the display of the first and second users.

36.-38. (canceled).

39. The method of claim 35, further comprising allowing the first user to:

(a) select a new user from among a plurality of potential users; and

(b) add that new user to an existing communication.

40. The method of claim 35, further comprising:

(a) detecting an attempt by a third user to initiate a communication with the first user;

(b) notifying the first user of the attempt; and

(c) allowing the first user to establish a communication with the third user.

41. The method of claim 40, wherein an indication of the attempt to initiate communications appears automatically on a user's display.

42. The method of claim 41, wherein the communications include video images of at least one user.

43. The method of claim 1, wherein the indication to the first user of whether another user is not logged in occurs if no service record is found for the other user.

44. The method of claim 18, wherein the indication to the first user of whether another user is not logged in occurs if no service record is found for the other user.

45. The method of claim 28, wherein the indication to the first user of whether another user is not logged in occurs if no service record is found for the other user.

46. The method of claim 35, wherein the indication to the first user of whether another user is not logged in occurs if no service record is found for the other user.

47. The method of claim 2, wherein the location includes address information.

48. The method of claim 12, wherein the location includes address information.

49. The method of claim 25, wherein the location includes address information.

50. The method of claim 35, wherein the location includes address information.

IX. Evidence Appendix

1. Submitted under IDS filed on June 29, 2006, "American Online Tour Guide" by Tom Lichty, Macintosh Edition, Version 2, Preface.

2. Submitted under IDS filed on June 29, 2006, "American Online Tour Guide" by Tom Lichty, Macintosh Edition, Version 2, pages 5-6.

3. Submitted under IDS filed on June 29, 2006, "American Online Tour Guide" by Tom Lichty, Macintosh Edition, Version 2, pages 70-72.

4. Submitted under IDS filed on June 29, 2006, "Mobile Instant Messaging Systems-A Comparative Study and Implementation" by Peter Salin, Helsinki University of Technology, Espoo, September 21, 2004, pages 10 and 22.

X. Related Proceedings Appendix

Copies of decisions of the following are attached in this appendix.

1. Application No. 09/702,737, Appeal No. 2004-0485
2. Patent No. 6,898,620, Application No. 09/072,549, Appeal No. 2003-0663
3. Patent No. 7,054,904, Application No. 10/120,307, Appeal No. 2005-2230
4. European Patent Application No. 99202661.7, Appeal No. T0403/02-3.5.3

The opinion in support of the decision being entered today was **not** written for publication and is **not** binding precedent of the Board.

Paper No. 19

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LESTER F. LUDWIG, J. CHRIS LAUWERS, KEITH A. LANTZ, GERALD J. BURNETT, and EMMETT R. BURNS

Appeal No. 2004-0485
Application No. 09/702,737

ON BRIEF

Before THOMAS, DIXON, and BARRY, **Administrative Patent Judges**.

DIXON, **Administrative Patent Judge**.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 21-41, which are all of the claims pending in this application.

We AFFIRM.

Appellants' invention relates to a participant display and selection in video conference calls. An understanding of the invention can be derived from a reading of exemplary claim 21, which is reproduced below.

21. A teleconferencing system for conducting a teleconference among a plurality of participants comprising:

(a) a plurality of video display devices each having associated

(i) participant video capture capabilities, and

(ii) participant audio

(1) capture and

(2) reproduction capabilities; and

(b) at least one communication path

(i) along which signals

(1) representing participant audio and video

(ii) can be transmitted, wherein the system is configured to

(a) display

(i) a first and a second directory each including potential video-enabled participants in which

(1) the first directory is viewable by all potential video-enabled participants, and

(2) the second directory is a subset of the first directory and viewable by a single participant,

(ii) on at least one video display device; and

(b) to initiate collaboration

(i) upon a selecting participant establishing communication

(1) with a selected participant

(2) to define the teleconference.

The prior art of record relied upon by the examiner in rejecting the appealed claims is as follows:

Baumgartner et al. (Baumgartner) 5,195,086 Mar. 16, 1993

Marshak, R. T. "BeyondMail for Windows: epitomizing the mail-enabled application," Patricia Seybold's Office Computing Report, Vol. 15, No. 9, Sep. 1992.

Rangan et al. (Rangan), "Software Architecture for Integration of Video Services in the Etherphone System," IEEE Journal on Selected Areas in Communications, Vol. 9, No. 9, pp. 1395-1404, December 1991.

Claims 21-41 stand rejected under 35 U.S.C. § 103 as being unpatentable over Baumgartner in view of Marshak and Rangan.

Rather than reiterate the conflicting viewpoints advanced by the examiner and appellants regarding the above-noted rejections, we make reference to the examiner's answer (Paper No. 14, mailed May 20, 2003) for the examiner's reasoning in support of the rejections, and to appellants' brief (Paper No. 13, filed Mar. 4, 2003) and reply brief (Paper No. 15, filed Jul. 23, 2003) for appellants' arguments thereagainst.

OPINION

In reaching our decision in this appeal, we have given careful consideration to appellants' specification and claims, to the applied prior art references, and to the respective positions articulated by appellants and the examiner. As a consequence of our review, we make the determinations which follow.

At the outset, we note that appellants elected to group all of the claims as standing or falling together. (Brief at page 3.) Therefore, we may select either independent claims 21 or 30. Since we find a similar scope in both claims, we select independent claim 21 and will address appellants' arguments thereto.

In rejecting claims under 35 U.S.C. § 103, the examiner bears the initial burden of presenting a ***prima facie*** case of obviousness. **See In re Rijckaert**, 9 F.3d 1531, 1532, 28 USPQ2d 1955, 1956 (Fed. Cir. 1993). A ***prima facie*** case of obviousness is established by presenting evidence that the reference teachings would appear to be sufficient for one of ordinary skill in the relevant art having the references before him to make the proposed combination or other modification. **See In re Lintner**, 458 F.2d 1013, 1016, 173 USPQ 560, 562 (CCPA 1972). Furthermore, the conclusion that the claimed subject matter is ***prima facie*** obvious must be supported by evidence, as shown by some objective teaching in the prior art or by knowledge generally available to one of ordinary skill in the art that would have led that individual to combine the relevant

teachings of the references to arrive at the claimed invention. **See In re Fine**, 837 F.2d 1071, 1074, 5 USPQ2d 1596, 1598 (Fed. Cir. 1988). Rejections based on § 103 must rest on a factual basis with these facts being interpreted without hindsight reconstruction of the invention from the prior art. The examiner may not, because of doubt that the invention is patentable, resort to speculation, unfounded assumption or hindsight reconstruction to supply deficiencies in the factual basis for the rejection. See **In re Warner**, 379 F.2d 1011, 1017, 154 USPQ 173, 177 (CCPA 1967), **cert. denied**, 389 U.S. 1057 (1968). Our reviewing court has repeatedly cautioned against employing hindsight by using the appellant's disclosure as a blueprint to reconstruct the claimed invention from the isolated teachings of the prior art. **See, e.g., Grain Processing Corp. v. American Maize-Prods. Co.**, 840 F.2d 902, 907, 5 USPQ2d 1788, 1792 (Fed. Cir. 1988).

When determining obviousness, "the [E]xaminer can satisfy the burden of showing obviousness of the combination 'only by showing some objective teaching in the prior art or that knowledge generally available to one of ordinary skill in art would lead that individual to combine the relevant teachings of the references.'" **In re Lee**, 277 F.3d 1338, 1343, 61 USPQ2d 1430, 1434 (Fed. Cir. 2002), citing **In re Fritch**, 972 F.2d 1260, 1265, 23 USPQ2d 1780, 1783 (Fed. Cir. 1992). "Broad conclusory statements regarding the teaching of multiple references, standing alone, are not

'evidence.'" **In re Dembiczak**, 175 F.3d 994, 999, 50 USPQ2d 1614, 1617 (Fed. Cir. 1999). "Mere denials and conclusory statements, however, are not sufficient to establish a genuine issue of material fact." **Dembiczak**, 175 F.3d at 999, 50 USPQ2d at 1617, citing **McElmurry v. Arkansas Power & Light Co.**, 995 F.2d 1576, 1578, 27 USPQ2d 1129, 1131 (Fed. Cir. 1993).

Further, as pointed out by our reviewing court, we must first determine the scope of the claim. "[T]he name of the game is the claim." **In re Hiniker Co.**, 150 F.3d 1362,1369, 47 USPQ2d 1523, 1529 (Fed. Cir. 1998). Therefore, we look to the limitations set forth in independent claim 21.

From our review of the examiner's rejection and the prior art applied against the claims, we find that the combined teachings of the prior art references would have fairly suggested the invention recited in independent claims 21 and 30. Therefore, we will sustain the rejection of independent claims 21 and 30 and their respective dependent claims.

We have considered appellants' arguments and do not find them persuasive. We address appellants' arguments in the same order as found in the brief and reply brief. Appellants argue that several of the elements of the claims are missing from Baumgartner, Marshak, and Rangan and there is no suggestion or motivation to modify Baumgartner or Marshak or Rangan or to combine their teachings to obtain the claimed

invention. (Brief at page 4.) We disagree with appellants and find that appellants' argument is based upon the individual teachings rather than the combined teachings of the three references.

Appellants argue that the prior art generally lacks a disclosure or suggestion of multiple directories in a video conferencing environment. (Brief at page 4.) We disagree with appellants and find that Marshak suggests multiple directoreis which may be used in any addressed communications as taught by Baumgartner and Rangan. Appellants argue that the e-mail area and the video area are sufficiently remote from each other so that the ordinarily skilled artisan armed with the knowledge of multiple directories in an e-mail context would not have been led to apply that knowledge to the videoconferencing art. (Brief at page 4.) We disagree with appellants and find that appellants have not presented evidence to support this position.

Appellants argue that Baumgartner does not specifically disclose usage of video or video capture capabilities. (Brief at page 4.) We disagree with appellants and the examiner's admission and find that Baumgartner suggests the use of his system with video capabilities in the discussion of the problem in column 1, lines 41-44, line 67-column 2, line 1 and column 2, lines 45-46. From our review of the language of independent claim 21, we find no specific details of the workings of the video processing. Therefore, this argument is not persuasive.

Appellants argue that Baumgartner does not disclose the first or second directory in which the second directory is a subset of the first directory. Appellants argue that Baumgartner does not teach or suggest a second directory at all. (Brief at page 4.) While we agree that Baumgartner does not disclose a second directory as disclosed by appellants, we find that Baumgartner does in fact teach multiple layers of directories. Baumgartner teaches a first directory in Figure 18, then Baumgartner discloses the use of a directory for the room as shown in Figures 19, 23(a), 23(b), 24(a) and 24(b) where the conferences can be split or merged. Therefore, we find the display of the participants in a room is a subset of the overall directory in Figure 18 and that this display of a room is a directory from which the conference can be further split into smaller conferences. Therefore, the fact that each conference can be split makes each layer a further directory from which to split the conference or from which to merge up.

Appellants argue that Marshak and the teachings of e-mail have nothing to do with videoconferencing or with video-enabled participants. (Brief at page 5.) We disagree with appellants and find that similar problems are encountered in the routing and determining of connections of email enabled participants and the solutions to ease user interfacing. Appellants therefore conclude that Marshak does not teach or suggest "any directory including video-enabled participants." While we must agree with appellants, this is due to the fact that Marshak is an e-mail system; therefore, it would not generally have video-enabled participants, but for the transmission of static video

clips such as MPEG files. Yet, Marshak clearly teaches the use of a public and private address books to ease the user's addressing and routing of mail to desired recipients. (Marshak at page 4.) Appellants argue that Marshak is silent whether the second directory can or should be a subset of the first directory and therefore does not teach or suggest the desirability of such a feature. We agree that Marshak does not teach a requirement that the second directory be required to be only a subset of the first directory, but we find it abundantly clear that the second directory may at times be a subset of the first directory and that it is the ease of addressing and formation of the second directory which is the motivation and not to fact that one is a subset of the other that is the driving force in the second directory. We find that most users setting up the second/private directory would use the public address book initially in establishing the second/private directory so that initially, the second/private directory would meet this limitation of independent claims 21 and 30. Therefore, this argument is not persuasive.

Appellants argue that in the system of Rangan, a caller must embark on a complex multi-step procedure to initiate a video conference. Appellants argue that Rangan teaches no directories and hardly allows for rapid teleconferencing connection set-up. (See brief at page 5.) While we agree with appellants, we find no apparatus or method steps in the language of independent claims 21 and 30 which are specifically directed to rapid teleconferencing connection set-up. Therefore, this argument is not persuasive.

With respect to the teachings of Rangan, we note that Rangan teaches that the general video server must support visual conferences, support video editing and mailing services. (Rangan at page 1395, column 2, first paragraph.) Here, we find that the teaching of "mailing services" buttresses the combination of video conferencing technology with email technology as taught by Baumgartner and Marshak. Additionally, Rangan teaches the use of a WINDOWS based GUI wherein we find similarities to teachings of Marshak.

Appellants argue that the examiner has not cited a reference that teaches or suggests directories of video-enabled participants. (See brief at page 6.) We disagree with appellants and find that the combination of the three teachings would have suggested the use of directories of video-enabled participants. Therefore, this argument is not persuasive.

Appellants argue that the use of e-mail directories does not teach or suggest applicability of plural directories in a real-time videoconferencing context. (See brief at page 6.) We disagree with appellants; and we find the methodology to address and route e-mail communications readily applicable to video communications. Furthermore, we find no limitation in the language of independent claims 21 and 30 which persuade us that it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine the three teachings and appellants have provided no evidence to the contrary. Appellants contrast the fast moving business activities with users able

to select participants in real time easily and quickly hiding the complex details of multichannel multimedia connection set up with the text exchange of Marshak. (See brief at pages 6-7.) Here, we do not find appellant's argument commensurate in scope with the claim language, and we find no language of independent claims 21 and 30 which persuade us that it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine the three teachings and appellants have provided no evidence to the contrary. Therefore, this argument is not persuasive.

Appellants argue that the prior art does not provide a second directory to facilitate immediate communication. As discussed above, we do not find this argument commensurate in scope with appellants' claimed invention. Therefore, this argument is not persuasive. Appellants conclude that even if one skilled in the art were to attempt to combine the teachings of Baumgartner, Marshak and Rangan, the resulting combination would not result in the claimed invention with first and second directory each including potential video-enabled participants. (See brief at page 7.) We disagree with appellants as discussed above.

Appellants argue that the claimed invention requires the second directory to be a subset of the first directory and that Marshak does not require one directory to be a subset of the other. (See brief at page 8.) While we agree with appellants that Marshak does not require the private directory to be a subset of the public directory, we find that it would have been obvious to one of ordinary skill in the art at the time of the

invention that certain individuals would set up their directories in this manner initially, but that they private directory may extend to others outside the public directory. Here, we also note that there are additionally personal distribution lists which were known at the time of the invention as a further level of directory which would be only viewable to its owner and that these may also be a subset of the private and/or public directories. Therefore, this argument is not persuasive.

Appellants argue that the second directory is like the concept of "quick dial" or "hot keys" which are populated by a drag and drop function. (See brief at page 8.) Again, we do not find this argument commensurate in scope with appellants' claimed invention and not persuasive.

Appellants argue that Marshak does not teach or suggest the relationship between the two directories and speculates that "[r]ather than the subset relationship, the private directory could be totally different, or partly different from the public directory." (See brief at page 8.) We agree with appellants, but also add that the private directory could be a subset of the public directory. Therefore, this argument is not persuasive. Appellants argue that an e-mail system actually would tend to preclude the subset relationship since users want to communicate with e-mail users outside the network. (See brief at page 8.) Here again we find that appellants speculate as to how a user may use both the public and private directories and do not find this argument persuasive as discussed above. Contrary to appellants' argument that Marshak is

silent as to the goals of the private directory, we find that the storage of addresses of anyone with e-mail accessibility and use of the stored addresses would have been an improvement in the efficiency over the input of each separate e-mail address by typing out the addresses.

Appellants argue in the reply brief that same argument with respect to the second directory being a subset of the first directory. (See reply brief at page 2.) We disagree with appellants as discussed above. Appellants argue that the modification of Marshak would render the system of Marshak unsatisfactory for its intended purpose. (See reply brief at page 2.) Appellant speculates about what e-mail users want to do outside their network/e-mail system. We find this to be mere speculation. Further, we could speculate that the users of the present invention would similarly like to communicate with others outside its global directory and then a new or expanded first or global directory would have to be formed. Therefore, we do not find appellants' speculation to be a persuasive argument.

Appellants argue that the participants have associated video capture capability. (See reply brief at pages 3-4.) We do not find this argument persuasive as discussed above. Furthermore, we find it analogous to the e-mail addresses whereas all to those addresses in both the public and private directories have the capabilities for the communication system to which they are connected. In an e-mail system, it would be the e-mail addressing and routing information stored and it would have been obvious to

one of ordinary skill in the art at the time of the invention that with a video based communication the stored participants would have their addresses stored.

Appellants argue that the examiner is incorrect in the position that only one entry need be in common to be a subset. (See reply brief at page 5.) We agree with appellants' definition of a subset, but disagree with appellants' interpretation and speculation about the directories in Marshak as discussed above. Appellants again argue the concept of "quick dial." We do not find this argument commensurate in scope with appellants' claims. Therefore, this argument is not persuasive. Since appellants have not shown error in the examiner's ***prima facie*** case of obviousness or provided a convincing line of reasoning as to why it would not have been obvious to one of ordinary skill in the art at the time of the invention to combine the teachings of the three references, we will sustain the rejection of independent claims 21 and 30 and their respective dependent claims.

Appellants argue the details of dependent claim 26 in the reply brief at page 6, but had previously elected to group all the claims together at page 3 of the brief. Claim 26 which depends from claim 21 has not been separately argued by appellants as required in 37 CFR § 1.192(c)(7) and (8)(iv) in the brief. Accordingly, we have determined that these claims must be treated as falling with their respective independent claim and argument thereto has been waived since appellants have not

shown good cause why it was not earlier presented. **See In re Nielson**, 816 F.2d 1567, 1572, 2 USPQ2d 1525, 1528 (Fed. Cir. 1987).

CONCLUSION

To summarize, the decision of the examiner to reject claims 21-41 under 35 U.S.C. § 103 is affirmed.

No time period for taking any subsequent action in connection with this appeal may be extended under 37 CFR § 1.136(a).

AFFIRMED

JAMES D. THOMAS
Administrative Patent Judge

JOSEPH L. DIXON
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

) BOARD OF PATENT
) APPEALS
) AND
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Paper No: 18
Appeal No: 2004-0485
Appellant: LUDWIG, LESTER F.
Application: 09/702,737

Board of Patent Appeals and Interferences
Docketing Notice

Application 09/702,737 was received from the Technology Center at the Board on December 16, 2003 has been assigned Appeal No: 2004-0485.

A review of the file indicates that the following documents have been filed by appellant:

Appeal Brief filed on:	March 4, 2003
Reply Brief filed on:	July 23, 2003
Request for Hearing filed on:	None

In all future communications regarding this appeal, please include both the application number and the appeal number.

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By order of the Board of Patent Appeals and Interferences

Paper No. 41

UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LESTER F. LUDWIG and J. CHRIS LAUWERS

Appeal No. 2003-0663
Application No. 09/072,549

ON BRIEF

Before KRASS, FLEMING and BARRY, Administrative Patent Judges.

KRASS, Administrative Patent Judge.

DECISION ON APPEAL

This is a decision on appeal from the final rejection of claims 1-5, 7-15, 17-25 and 27-31.

The invention is directed to a video communication system. More particularly, the system permits teleconferencing, involving the transmission of high-quality color video images, meeting NTSC standards, over unshielded twisted pair (UTP) lines which are part of a computer network.

Representative independent claim 1 is reproduced as follows:

1. A video communication system comprising:

(a) at least one analog video-signal source;

(b) a plurality of video display devices;

(c) at least one communication control component configured

(i) to produce digital control-signals; and

(d) a computer network; including.

(i) an unshielded twisted pair of wires,

(1) defining a UTP communication path

(2) arranged for video-signal transportation,

wherein the system is configured to multiplex

(1) analog video-signals,

a. originating at one of the video-signal sources,

(2) with digital control-signals;

a. from one of the communication control components

(ii) transmit

(1) the multiplexed signals

(2) along the UTP communication path,

(3) to at least one of the video display devices,

and

(iii) use

(1) the control-signals

(2) to control reproduction of color video images

a. at TV quality,

b. based on the video-signals,

c. on at least one of the video display

devices.

The examiner relies on the following references:

Verhoechx et al. (Verhoeckx)	4,005,265	Jan. 25, 1977
Tompkins et al. (Tompkins)	4,847,829	July 11, 1989

Ramanathan et al. "Optimal Communication Architecture for Multimedia Conferencing in Distributed System" IEEE Computer Society Technical Committee on Distributed Processing, 1992, pp. 46-53.

Rangan et al. "Software Architecture for Integration of Video Services in the Etherphone System", IEEE Journal on Selected areas in Communications Vol. 9. No. 9 December, 1991, pp. 1395-1404.

Stefik et al. "Beyond the Chalkboard: Computer Support for Collaboration and Problem Solving in Meetings", Communications of the ACM, Jan. 1987, Vol. 30, pp. 32-47.

Claims 1-5, 7-15, 17-25 and 27-31 stand rejected under 35 U.S.C. § 112, first paragraph, as relying on a non-enabling disclosure.

Claims 1-5, 7, 12-15, 17, 21-25 and 27 stand rejected under 35 U.S.C. § 103. As evidence of obviousness, the examiner offers Verhoeckx with regard to claims 1, 12-14 and 21; Tompkins in view of Verhoeckx with regard to claims 1-5, 12-15 and 21-25; and adds Ramanathan to this latter combination with regard to claims 7, 17 and 27. Further, the examiner offers Tompkins, Verhoeckx, Ramanathan and Rangan with regard to claims 8, 18 and 28. Tompkins, Verhoeckx, Ramanathan and Stefik are offered with regard to claims 9-11, 19, 20 and 29-31.

Reference is made to the briefs and answer for the respective positions of appellants and the examiner.

OPINION

Turning first to the rejection under 35 U.S.C. § 112, first paragraph, it is the examiner's position that the claims rely on a non-enabling disclosure because the claims call for the transmission of "TV quality" video signals over UTP communication paths and, in the examiner's view, the instant disclosure would not have enabled the skilled artisan to transmit such signals without undue experimentation.

As a matter of Patent and Trademark Office practice, a specification disclosure which contains a teaching of the manner and process of making and using the invention in terms which correspond in scope to those used in describing and defining the subject matter sought to be patented *must* be taken as in compliance with the enabling requirement of the first paragraph of 35 U.S.C. 112 *unless* there is reason to doubt the objective truth of the statements contained therein which must be relied on for enabling support. Assuming that sufficient reason for such doubt does exist, a rejection for failure to teach how to make and/or use will be proper on that basis; such a rejection can be overcome by suitable proofs indicating that the teaching contained in the specification is truly enabling, In re Marzucchi, 439 F.2d 220, 169 USPQ 367 (CCPA 1971); In re Sichert, 566 F.2d 1154, 196 USPQ 209 (CCPA 1977).

Appellants cite page 23 of the specification, as well as Figures 18 and 19 of the application, and the Ludwig declaration, filed January 16, 2001 (Paper No. 23), for the proposition that video signals are passed through loopback/AV mute circuitry 830 via video ports 833 (input) and 834 (output) and into A/V Transceivers 840 (via Video In port 842) where they are transformed from standard video cable signals to UTP signals and

sent out via port 845 and Audio/Video I/O port 805 onto AV Network 901. Appellants contend that these teachings show that the transmission of TV-quality video over UTP is accomplished by this video communications system having an Audio/Video (A/V) transceiver as shown in Figure 19.

It appears to us that appellants have given a reasonable explanation as to how the TV-quality transmission is accomplished while the examiner merely asserts that the specification merely recites a desire to have "TV-quality" video without an adequate disclosure as to how to accomplish this. On balance, it does not appear to us that the examiner has made a reasonable finding to doubt the objective truth of appellants' statements as to how TV-quality transmission is effected. Since we find no sufficient reason to doubt appellants' disclosure and statements, as well as the statements in the Ludwig declaration, we will not sustain the rejection of claims 1-5, 7-11, 21-25 and 27-31 under 35 U.S.C. § 112, first paragraph.

When a rejection is made on the basis that the disclosure lacks enablement, it is incumbent upon the examiner to explain why he/she doubts the truth or accuracy of any statement in a supporting disclosure and to back up assertions with acceptable evidence or reasoning which is inconsistent with the contested

statement. The examiner has not advanced any such evidence or an acceptable line of reasoning inconsistent with enablement and, therefore, has not sustained his/her burden.

An affidavit declaration by an expert, rather than the person of ordinary skill, is one alternative available to demonstrate enablement. In re Longe, 644 F.2d 856, 209 USPQ 288 (CCPA 1981). While the Ludwig declaration is offered by appellants to demonstrate enablement, an acceptable form of evidence, the examiner never addresses the credentials of Mr. Ludwig nor does the examiner address the statements made in the declaration proffered to demonstrate enablement. Thus, again, we will not sustain the rejection under enablement because, on balance, it is our view that appellants make a colorable case for enablement while the examiner falls far short of stating a reasonable case for non-enablement.

We now turn to the rejection of claims 1-5, 7, 12-15, 17, 21-25 and 27 under 35 U.S.C. § 103.

The examiner rejects all of the independent claims based on the single reference to Verhoeckx, contending that the reference teaches the claimed system, with an analog video-signal source (abstract-line 6), a video display device (apparent), a control communication component configured to produce digital control

signals (abstract, line 5-signaling signals), an unshielded twisted pair of wires (telephone wire) defining a UTP communication path (column 20, lines 20+)[1] arranged for video-signal transportation, wherein the system is configured to multiplex analog video signals with digital controls (lines 19-27)[2] and to transmit the multiplexed signals along the UTP communication path, etc.

The examiner indicates that Verhoeckx does not teach the UTP wire being included as part of a computer network, but that Verhoeckx does teach using the existing UTP wire of a telephone network. The examiner then contends that the claimed "computer network" is a "merely nominal recitation" and that there is no "functional relationship tying the elements of the claims to the 'computer network'" (answer-page 5). The examiner concludes that the recited elements would function exactly the same way over a UTP path separate from that of a "computer network" and that integrating the video UTP with an existing UTP computer network path would have been "a matter of economic" (answer-page 5) and it would have been obvious to apply Verhoeckx in a computer

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[1]We note that while the examiner refers to column "20," the reference has only 12 columns.

[2] We note that the examiner refers to lines "19-27" but does not identify any particular column of the reference.

network "because it would have enabled the video transmission over existing paths and reduced the need to run new wires" (answer-page 6).

We will not sustain the rejection of claims 1, 12-14 and 21 under 35 U.S.C. § 103 over Verhoeckx.

With regard to the "TV quality" feature of the instant claims, the examiner merely points to a disclosure in Verhoeckx, at column 7, line 32, which indicates a picture frequency of "25 Hz" but the examiner never explains why this is considered to be "TV quality." It is not clear from any teaching in Verhoeckx that the reference provides for TV quality color video images.

Moreover, the instant claims are very specific to a "computer network," yet the examiner dismisses this as a "merely nominal recitation." Also, the instant claims require a multiplexing of analog-video signals with digital control-signals from one of the communication control components. Appellants have argued, very strongly, that the Verhoeckx digital operations simply reorganize the synchronization signals themselves, but no more (principal brief-page 7), so that these digital operations "in no way involve the introduction of digital control signals from any sort of communications control component," as claimed. Appellants point out that Verhoeckx lacks any communications

control component at all and there is "no computer networking aspect to Verhoeckx whatsoever" (principal brief-page 7). The examiner offers no reasonable rebuttal to this argument.

Additionally, appellants point out that Verhoeckx's modified synchronization signals within the video signal are in no way equivalent to the digital control signals from communication control components of the claimed invention recited in claims 1 and 21 and their dependencies. But, the examiner has no reasonable answer to these differentiations by appellants.

Since there are so many missing claimed elements from Verhoeckx, together with unconvincing rationales by the examiner, we find that the examiner has not established a prima facie case of obviousness with regard to the instant claimed subject matter. But, to whatever extent there may have been a prima facie case, we find that appellants have overcome the case with arguments that are not convincingly rebutted by the examiner.

We also will not sustain the rejection of claims 1-5, 8-15, 17-25 and 27-31 under 35 U.S.C. § 103 over Verhoeckx in combination with either Tompkins and/or Ramanathan and/or Rangan and/or Stefik since none of the latter references provides for the deficiencies of Verhoeckx.

The examiner's decision is reversed.

REVERSED

ERROL A. KRASS
Administrative Patent Judge

MICHAEL R. FLEMING
Administrative Patent Judge

LANCE LEONARD BARRY
Administrative Patent Judge

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Appeal No. 2003-0663
Application No. 09/072,549

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UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte LESTER F. LUDWIG, J. CHRIS LAUWERS, KEITH A. LANTZ, GERALD J. BURNETT, and EMMETT R. BURNS

Appeal No. 2005-2230
Application No. 10/120,307

ON BRIEF

Before RUGGIERO, GROSS, and SAADAT, ***Administrative Patent Judges***.

GROSS, ***Administrative Patent Judge***.

DECISION ON APPEAL

This is a decision on appeal from the examiner's final rejection of claims 21, 24, 39, and 42.

Appellants' invention relates to a computer-based multimedia collaboration system in which an audio or video signal is captured, stored, and marked such that the marked signals can later be searched. Claim 21 is illustrative of the claimed invention, and it reads as follows:

21. A networked multimedia system comprising:

A) one or more workstations, each including
i) video and audio reproduction capabilities, and
ii) video and audio capture capabilities;

B) at least one storage cell configured to
i) store audio/video signals; and

C) at least one signal path,
i.) interconnecting the one or more workstations and the at least one storage cell,

wherein the system is configured to

D) mark the captured audio/video signals,
i) such that the marked audio/video signals
ii) can later be searched
iii) to access a selected portion thereof; and

E) search the marked audio/video signals
i) in the at least one storage cell to access the selected portion.

The prior art references of record relied upon by the examiner in rejecting the appealed claims are:

P. Venkat Rangan et al., "Software Architecture for Integration of Video Services in the Etherphone System," IEEE Journal on Selected Areas in Communications, Vol. 9, No. 9, December 1991, pp. 1395-1404. (Rangan)

Polle T. Zellweger et al., "An Overview of the Etherphone System and Its Applications," 1988 IEEE, pp. 160-168. (Zellweger)

Claims 21 and 39 stand rejected under 35 U.S.C. § 102(b) as being anticipated by Rangan.

Claims 24 and 42 stand rejected under 35 U.S.C. § 103 as being unpatentable over Rangan in view of Zellweger.

Reference is made to the Examiner's Answer (Paper No. 15, mailed October 15, 2004) for the examiner's complete reasoning in support of the rejections, and to appellants' Brief (Paper No.

14, filed August 19, 2004) and Reply Brief (filed December 15, 2004) for appellants' arguments thereagainst.

OPINION

We have carefully considered the claims, the applied prior art references, and the respective positions articulated by appellants and the examiner. As a consequence of our review, we will reverse the anticipation rejection of claims 21 and 39 and also the obviousness rejection of claims 24 and 42.

With regard to claims 21 and 39, the only limitation at issue is the marking of the video/audio signal for later searching. The examiner contends (Answer, page 4) that Rangan's statement on page 1402 that "[a]ny part of the bar (i.e., video rope) can be selected and played back, moved, copied or deleted," suggests that the captured audio/video signals are marked such that they can be searched later to access a selected portion. The examiner further states (Answer, page 6) that laser disc storage (which is used by Rangan) "inherently . . . has some type of marking or index so that data can be directly accessed." Last, the examiner asserts (Answer, page 7) that Rangan's creation of a video rope is equivalent to the marking of selected portions.

Appellants' position (Brief, page 6) is that Rangan fails to teach marking video signals for searching selected portions. Appellants assert (Brief, page 7) that in Rangan, "[a]lthough a user of the Rangan system can get to a desired portion by scanning over the video, the visual scanning Rangan would support does not utilize or rely on marking in order to conduct a search," as recited in the claims. Appellants further explain that to retrieve a portion of the video rope, the user must playback each interval until the appropriate one is found. There is no marking to search. Additionally, with regard to Rangan's optical disc, appellants contend (Reply Brief, page 4) that the examiner has provided no evidence to support his assertion that marking is inherent in optical disc storage.

We agree with appellants. We find nothing in Rangan that suggests searchable markers. Although portions of the video or audio signal can be accessed, Rangan does not teach or suggest that they are marked such that the markers can be searched. Further, the examiner has failed to provide evidence to support the assertion that Rangan's optical disc inherently includes searchable markers. Accordingly, we cannot sustain the anticipation rejection of claims 21 and 39.

As to claims 24 and 42, the examiner contends (Answer, page 4) that Zellweger discloses marking audio by adding tags. However, the relied upon portions of Zellweger merely discuss annotating a signal, not marking with searchable tags. Thus, neither Rangan nor Zellweger discloses marking the signals for later searching by adding tags. Consequently, we cannot sustain the obviousness rejection of claims 24 and 42.

CONCLUSION

The decision of the examiner rejecting claims 21 and 39 under 35 U.S.C. § 102(b) and claims 24 and 42 under 35 U.S.C. § 103 is reversed.

REVERSED

JOSEPH F. RUGGIERO)
Administrative Patent Judge)
)
)
)
ANITA PELLMAN GROSS) BOARD OF PATENT
Administrative Patent Judge) APPEALS
) AND
) INTERFERENCES
)
)
MAHSHID D. SAADAT)
Administrative Patent Judge)

APG/vsh

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PATENT APPLICATION

#14

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Lester F. LUDWIG, et al.

Appln. No.: 10/120,307

Confirmation No.: 1287

Filed: April 9, 2002

Docket No: CA1155

Group Art Unit: 2153

Examiner: D. Dinh

For: MARKING AND SEARCHING CAPABILITIES IN MULTIMEDIA DOCUMENTS WITHIN MULTIMEDIA COLLABORATION NETWORKS

SUBMISSION OF APPELLANTS' BRIEF ON APPEAL

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Submitted herewith please find an original and two copies of Appellants' Brief on Appeal. Please charge the statutory fee of $165.00 to Deposit Account No. 19-4880. The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account. A duplicate copy of this paper is attached.

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Respectfully submitted,

for Frank C. Bernstein (Reg. No. 49,232)

Frank L. Bernstein
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MOUNTAIN VIEW OFFICE
23493
CUSTOMER NUMBER

Date: August 16, 2004

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Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Date: August 16, 2004

Signed: Mariann Tam

PATENT APPLICATION

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

In re application of

Lester F. LUDWIG, et al.

Appln. No.: 10/120,307

Confirmation No.: 1287

Filed: April 9, 2002

Docket No: CA1155

Group Art Unit: 2153

Examiner: D. Dinh

For: MARKING AND SEARCHING CAPABILITIES IN MULTIMEDIA DOCUMENTS WITHIN MULTIMEDIA COLLABORATION NETWORKS

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192

MAIL STOP APPEAL BRIEF - PATENTS
Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Sir:

Appellants, within a four (4) month period from the April 16, 2004, filing date of the Notice of Appeal, extended by concurrent filing of a petition for two-month extension of time and payment of fee, herein file an Appeal Brief drafted in accordance with the provisions of 37 C.F.R. §1.192 as follows:

I. REAL PARTY IN INTEREST

The real party in interest here is the owner of the application, Collaboration Properties, Inc.

II. RELATED APPEALS AND INTERFERENCES

To the best of their knowledge, Appellants are not aware of any appeals or interferences involving the present application.

III. STATUS OF CLAIMS

Claims 21-26, 29-44, and 47-56 are pending. Claims 21-23, 30, 39-41, and 49 stand rejected under 35 U.S.C. §102(b) as being anticipated by Tiogavision as disclosed in Rangan et al. "Software Architecture for Integration of Video Services in the Etherphone System." Claims 24-26, 29, 42-44 and 47-48 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rangan and further in view of Zellweger et al., "An Overview of the Etherphone System and its Application." Claims 31-38 and 49-56 stand rejected under 35 U.S.C. §103(a) as being unpatentable over Rangan and further in view of Maeno et al., "Distributed Desktop Conferencing System (MERMAID)."

Appellants are only appealing the rejection of claims 21, 24, 39, and 42.

IV. STATUS OF AMEDMENTS

The claims have not been amended pursuant to final rejection.

V. SUMMARY OF THE INVENTION

The present application provides a computer-based multimedia collaboration system for enhancing collaboration between and among individuals separated by distance and/or time, recording and storing the teleconference for later playback, and marking and searching of the video/audio signals (specification, page 1, second paragraph; and page 6, the second paragraph of the Summary of the Invention).

According to the claimed invention, a recorded video sequence is marked, e.g., by time codes or video frame numbers (specification, page 40, the third full paragraph). In addition, a video highlight feature permits a composer of the message to define "tags" (e.g., by clicking a TAG button) during record time which are stored with the message along with a "time stamp," and which cause a predefined or selectable audio and/visual indicator to be played/displayed at that precise point in the message during playback (specification, page 54, the third full paragraph). A user can search the multimedia documents stored within a multimedia document management (MMDM) system to access the selected portion.

The specialized search system 520 in Fig. 31D comprises utilities that allow users to do sophisticated searches across and within multimedia documents. This includes context-based and content-based searches, time-based searches, and event-based searches (specification, page 47, the last paragraph). To support intra-file searching, the present application provides operations, such as start, stop, pause, fast forward, reverse, and more generalized "go-to" operation; and mechanisms, such as frame numbers or time code (specification, the paragraph

bringing pages 42-43). As a result, a user can rapidly access selected portions of a stored multimedia document.

Accordingly, to facilitate search, the claimed inventions mark multimedia documents not only with index tags (such as time stamps), but also with added searching tags created and defined by the user.

VI. ISSUES

1. Do the references cited by the Examiner teach or reasonably suggest marking captured audio/video signals such that the marked audio/video signals can later be searched to access a selected portion thereof?

VII. GROUPING OF CLAIMS

Claims 21 and 39 stand and fall together. Claims 24 and 42 stand and fall together.

VIII. ARGUMENTS

Introduction

The present application differs from the cited references, specifically from Rangan. The Examiner has asserted that searching is inherent in the teaching of Rangan, because Rangan uses a laser disc storage system. However, as Applicants will explain in detail, Rangan only teaches reviewing a video and selecting a portion of it, but fails to teach or suggest the required marking of captured audio/video signals such that the marked audio/video signals can later be searched to access a selected portion thereof.

Rangan

In Rangan, to record a piece of video output of a conference into a document, a video rope server (VRS) is invoked by an editor to start recording a conference output, and creates a video rope representing the sequence of recorded frames. The editor stores the video rope as part of the document, thereby allowing text and video to be freely interspersed within text documents (Rangan, page 1401, right column, the second last paragraph).

Users of the Rangan system manipulate multimedia documents containing text and video through a Tiogavision window. To edit a document, a user opens a Tiogavision window on the document. A video recording session begins when a user clicks an AddVision button, and ends when the user clicks Stop on Tiogavision (Rangan, page 1402, left column, the first paragraph).

While displaying a multimedia document, Tiogavision displays an annotation icon at each location at which a video rope has been recorded and positioned within the document. Clicking an Open button will expand a selected annotation icon into a bar of length proportional to the duration of the video rope it represents. Any part of the bar (i.e., the video rope) can be selected and played back, moved, copied or deleted like normal text, and new video can be inserted at any position on the bar. During recording or retrieval of the video rope, a cursor tracks the current position on the bar (Rangan, page 1402, left column, the second paragraph).

Appellants argued in a response dated March 18, 2004 ("the March 2004 Response") that Rangan only teaches selecting and playing back a part of the bar, i.e., the video rope, but fails to teach or suggest searching audio/video signals to access a selected portion. In response, the Examiner has asserted that it is well known in the art that laser disc video has capabilities for

searching via title number, chapter number, and specific play-time of the video on the disc. The Examiner then argued that Rangan teaches using a laser disc storage system, and thus Rangan inherently has the search capabilities. Appellants respectfully disagree.

Even assuming that, as the Examiner has asserted, it is known in the art that laser disc video has capabilities for searching via title number, chapter number and specific play-time of the video on the disc on the priority date of the present application, October 1, 1993, the title number, chapter number and specific play-time referred to by the Examiner are only index tags. The prior art fails to teach or suggest marking video signals with searching tags created and defined by a user to facilitate later search.

In the multimedia document of Rangan, the video signal is an annotation icon representing a video rope, and can be displayed only when the Open button on a Tiogavision window is clicked. Rangan teaches a cursor tracking the current position on the bar during recording or retrieval of the video rope. But again, Rangan at most teaches providing the video rope with a free-running index, but not marking video signals by searching tags defined by users.

Further, the annotation icon in Rangan is used to intersperse text and video (Rangan, page 1402, the paragraph bridging left and right columns). The annotation icon is not used to mark portions of a video recording within a stored video file for later search either.

The Examiner has further asserted that Rangan teaches that the user can create a video rope from selecting a certain portion of a video, and selection of a video clearly involves actual search by a time code or title or chapter, or visual scanning over the video to get the desired

portion. The Examiner then asserts that searching is inherent in teaching of Rangan. Appellants respectfully disagree.

Again, the time code, title and chapter number referred to by the Examiner are index tags only. The prior art does not teach or suggest marking video signals with user defined search tags.

Although a user of the Rangan system can get to a desired portion by scanning over the video, the visual scanning Rangan would support does not utilize or rely on marking in order to conduct a search. On the other hand, in the claims of the present application, the audio/video signals are marked to enable search. Thus, visual scanning of Rangan does not teach or reasonably suggest searching of the present application.

Thus, Appellants respectfully resubmit that Rangan fails to teach or suggest marking captured audio/video signals such that the marked audio/video signals can later be searched to access a selected portion thereof, and claims 21 and 39 are patentable.

Claims 24 and 42 specifically recite marking the audio/video signals by adding tags and searching according to the tags. For the sake of argument, Appellants submit that claims 24 and 42 are patentable.

Zellweger

As Appellants pointed out in the March 2004 Response, Zellweger does not remedy any deficiency of Rangan.

Zellweger discloses a voice annotation and editing system. As shown in Fig. 1, the Zellweger Etherphone system comprises a voice control server, a voice file server, a text-to-speech synthesizer, and a plurality of Etherphones. As shown in Fig. 5, the Zellweger voice annotation and editing window comprises several menu buttons, e.g., AddVoice, and PlayVoice, used to manipulate voice signals. A voice annotation, such as the one appears on the word "short" in the second line of text, could be opened for editing in the lower window, labeled "Sound Viewer #1". A playback cue, i.e., the gray rectangle underneath the word "score", is provided to indicate the progress of voice playback.

The Examiner has asserted that Zellweger teaches marking audio by adding tags thereto. However, the marking in Zellweger is added for voice annotation, not for later search of the recorded audio. In fact, Zellweger does not talk about searching recorded audio in any way. Thus, Zellweger does not teach or suggest marking captured audio/video signals such that the marked audio/video signals can later be searched to access a selected portion thereof. Moreover, Appellants submit that Zellweger fails to teach or suggest the specific marking and searching recited in claims 24 and 42.

Accordingly, Appellants respectfully submit that claims 24 and 42 are patentable for this additional reason as well.

IX. CONCLUSION

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192
U.S. Appln. No.: 10/120,307

Pursuant to the foregoing arguments, Appellants submit that claims 21, 24, 39 and 42 are patentable. Accordingly, Appellants respectfully request that the Examiner's rejection be reversed, and the present application allowed at the earliest possible opportunity.

The present Brief on Appeal is being filed in triplicate. Unless a check is submitted herewith for the fee required under 37 C.F.R. §1.192(a) and 1.17(c), please charge said fee to Deposit Account No. 19-4880.

The USPTO is directed and authorized to charge all required fees, except for the Issue Fee and the Publication Fee, to Deposit Account No. 19-4880. Please also credit any overpayments to said Deposit Account.

Respectfully submitted,

for Frank L. Bernstein (Reg. No. 48,232)
Registration No. 31,484

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Date: August 16, 2004

Signed: _____
Mariann Tam

APPELLANTS' BRIEF ON APPEAL UNDER 37 C.F.R. § 1.192
U.S. Appln. No.: 10/120,307

APPENDIX

CLAIMS 21, 24, 39 and 42 ON APPEAL:

21. A networked multimedia system comprising:

A) one or more workstations, each including

i) video and audio reproduction capabilities, and

ii) video and audio capture capabilities;

B) at least one storage cell configured to

i) store audio/video signals; and

C) at least one signal path,

i) interconnecting the one or more workstations and the at least one storage cell,

wherein the system is configured to

D) mark the captured audio/video signals,

i) such that the marked audio/video signals

ii) can later be searched

iii) to access a selected portion thereof; and

E) search the marked audio/video signals

i) in the at least one storage cell to access the selected portion.

24. The networked multimedia system according to claim 21, wherein the audio/video signals are

D1) marked by adding tags thereto; and

E1) searched according to the tags.

39. A method for providing networked multimedia collaboration, said method comprising:

A) capturing audio and video signals at

i) one or more workstations;

B) marking the captured audio/video signals

i) such that the marked audio/video signals

ii) can later be searched

iii) to access a selected portion;

C) storing the marked audio/video signals within at least one storage cell;

D) searching the stored audio/video signals for a selected portion; and

E) displaying the selected portion.

42. The method according to claim 39, wherein the audio/video signals are

B1) marked by adding tags thereto; and

D1) searched according to the tags.

Europäisches Patentamt | European Patent Office | Office européen des brevets

Beschwerdekammern | Boards of Appeal | Chambres de recours

Case Number: T 0403/02 - 3.5.3

D E C I S I O N
of the Technical Board of Appeal 3.5.3
of 18 May 2005

Appellant: Collaboration Properties, Inc.
P.O. Box 7097,
Suite 7,
913 Village Boulevard
Incline Village,
Nevada 89452 (US)

Representative: Abnett, Richard Charles
REDDIE & GROSE
16 Theobalds Road
London WC1X 8PL (GB)

Decision under appeal: Decision of the Examining Division of the European Patent Office posted 26 October 2001 refusing European application No. 99202661.7 pursuant to Article 97(1) EPC.

Composition of the Board:

Chairman: A. S. Clelland
Members: D. H. Rees
R. T. Menapace

Summary of Facts and Submissions

I. This is an appeal from the decision of the examining division to refuse the European patent application number 99 202 661.7, with publication number 0 955 765, a divisional application of European patent application 94 921 163.5, with publication number 0 721 725. The decision was announced in oral proceedings held on 10 October 2001 and written reasons were dispatched on 26 October 2001. The reason given for refusing the application was that the claimed subject-matter of the main as well as of first and second auxiliary requests did not involve an inventive step with respect to the disclosure of document

D3: H.M. Vin et al., "Multimedia Conferencing in the Etherphone Environment," Computer, October 1991, IEEE, Los Alamitos, CA, US, pages 69 to 79,

in combination with the common general knowledge of the skilled person. Third and fourth auxiliary requests were found to contain subject-matter which extended beyond the content of the application as filed.

II. The following further documents are relevant to the present decision:

D1: C. Weiss, "Desk Top Video Conferencing - an Important Feature of Future Visual Communications," IEEE International Conference on Communications ICC '90, 15-19 April 1990, Conference Record, vol. 1, pages 134 to 139,

D4: J. Anderson et al., "Codec squeezes color teleconferencing through digital telephone lines," Electronics International, vol. 57(1984), Jan., no. 2, New York, USA, pages 113 to 115, and

D6: Press release of the International Organisation for Standardisation, ISO/IEC JTC1/SC29/WG11 N0389,, 2 April 1993.

III. Notice of appeal was filed and the fee paid on 21 December 2001. Claim sets of a main and two auxiliary requests were submitted with a statement setting out the grounds of appeal on 26 February 2002. Claim 1 of the main request corresponded to that of the first auxiliary request in the decision of the first instance.

IV. In a preliminary communication annexed to a summons to attend oral proceedings the board questioned whether the independent claims of all the requests could be considered clear and whether they added subject-matter to the application as filed. Further, the claimed subject-matter of all the requests appeared on the basis of a preliminary analysis to lack an inventive step with respect to the disclosure of D3 and D1 and the common general knowledge of the skilled person as illustrated by D6, which was annexed to the communication.

V. In preparation for the oral proceedings, the appellant added two new auxiliary requests and submitted further arguments. A further amendment of the claimed subject-matter, which would apply to all of the requests, was offered on an auxiliary basis.

VI. At the oral proceedings the appellant amended claim 1 of the first auxiliary request and, as a result of the discussion, claim 1 of the main request. It was also made clear that two statements in the written proceedings had been made in error, and were withdrawn. The first was the assertion that the "appropriate transceivers" referred to in paragraph 0028 of the published application had been developed by the appellant for the teleconferencing system (submission of 18 April 2005, page 4, lines 19 to 26). Available transceivers had in fact simply been procured. The second statement withdrawn was the assertion that MPEG-1 and MPEG-2 have not "to this day" been used for real-time video compression in a commercial product (same submission, page 3, lines 34 and 35).

VII. At the oral proceedings the appellant requested that the decision under appeal be set aside and that a patent be granted on the basis of claims 1 to 11 submitted as main request in the oral proceedings. At the end of the oral proceedings the chairman announced the board's decision.

VIII. The single independent claim 1 of the main request reads as follows:

"A teleconferencing system for conducting a teleconference among a plurality of participants comprising:

(a) a plurality of workstations (12), each including:

(i) associated monitors (200) for displaying visual images, and

(ii) associated audio and video (AV) capture (500, 600) and reproduction (200, 700)

capabilities for capturing and reproducing participant audio and video images of the participants;

(b) an analog audio and video (AV) signal path (13b, 14) for carrying audio and video signals, representing participant audio and video images, among the workstations (12), at least part of the AV path (13b) being implemented with unshielded twisted pair wiring; and

(c) a video mosaic generator (36), in communication with the AV path (13b, 14), for combining captured video images of at least a first and a second participant into a video mosaic image for reproduction at at least one workstation (12), wherein a full-screen video image of at least the second participant is carried on the AV path (13b, 14) at full motion color TV quality such that when reproduced the video image is perceived by a viewer as equivalent to one at NTSC quality."

Reasons for the Decision

1. *Admissibility of the amendments*

1.1 Claim 1 of the main request corresponds substantively to claim 1 as filed, with "an audio and video (AV)" in feature (b) replaced by "an analog audio and video (AV)", and the addition of "wherein a full-screen video image of at least the second participant is carried on the AV path (13b, 14) at full motion color TV quality such that when reproduced the video image is perceived by a viewer as equivalent to one at NTSC quality," at the end of the claim. That the audio and video path is

analogue, introduced in response to an objection by the board that the application did not, according to the appellant's own arguments, enable a digital implementation at the priority date, is clearly disclosed at paragraph 0027 of the published application. The final form of the second amendment was also introduced in response to an objection by the board, namely that the previous formulations left open the display size of the image of the second participant and therefore had no limiting effect on the bandwidth requirement of the AV path. That the displayed image may have the quality of an NTSC image is disclosed at paragraph 0025, and that the AV path must be capable of carrying at least close to a full motion NTSC-standard image is clearly implied by the requirement for the system to display a nearly full-screen image of a remote participant as disclosed at e.g. paragraph 0110 and shown in Figure 8A. It is further clear from paragraph 0025 that there is no requirement to reproduce an NTSC signal as such, only the quality is significant ("at standard NTSC-quality TV performance"). Hence the requirement for an image "equivalent to one at NTSC quality" is also disclosed in the application as filed.

The board concludes that the subject-matter of claim 1 of the main request was disclosed in the application as filed.

1.2 The dependent claims and description remain substantively as originally filed, with the exception of claim 2. Originally it was specified that "a participant can select the image of one of the participants in the mosaic image and, thereby, replace

the mosaic image with the image of the selected image." The present version adds that "the video mosaic generator is adapted to allow" this. Since it is disclosed that the mosaic generator reduces the resolutions of individual images in order to form a multiple image mosaic (paragraph 0054), and since a single image is required to be displayed at full resolution, it is clear that the mosaic generator must treat the two cases differently, and therefore "be adapted to allow" the display of a single participant image.

1.3 Hence the board concludes that the claims of the main request satisfy the requirements of Article 123(2) EPC.

2. *Clarity*

2.1 The examining division did not raise any objections under Article 84 EPC and the board also considers that the claimed subject-matter is clear in general. However, in its preliminary opinion the board raised the question whether "full motion color TV quality such that the video image is perceived by a viewer as equivalent to one at NTSC quality" clearly defined the matter for which protection was sought. The question remains relevant since the current formulation would also require a determination of whether an image is considered to be equivalent to NTSC or not. However, on reflection the board concludes that it would be within the abilities of the skilled addressee for example to devise and carry out statistical tests to determine whether an average viewer could distinguish between the quality of a genuine NTSC image and that of an image produced otherwise according to the claimed invention.

2.2 The appellant acknowledged in the oral proceedings that minor amendments would probably need to be made to the description in order, for example, to remove inconsistencies between what is claimed and what is said to be the invention in the description. The board concurs.

3. *Novelty and inventive step*

3.1 The examining division considered that D3 was the document disclosing the closest prior art. It identified two differences between the then claimed subject-matter and the disclosure of D3, namely that the video image was reproduced at TV quality (NTSC in the first auxiliary request) and that at least part of the AV path was implemented with unshielded twisted pair wiring. The examining division asserted that "The transmission of audio visual data over a twisted pair is nothing surprising," (decision to refuse, Point 3) and "The transmission of NTSC quality video over unshielded twisted pair wiring does not require any special measures since unshielded twisted pair wiring accommodates sufficient bandwidth," (Point 6).

3.2 The appellant has argued that it would have been surprising to the skilled person that it was possible to transmit analogue NTSC quality signals on unshielded twisted pair (UTP) wiring. While the appellant has not presented any actual evidence of a prejudice against using UTP wiring for analogue transmission of NTSC-quality audio and video, the board notes that the documents currently at its disposal and the argumentation of the examining division reflect an

assumption that the video data would be transmitted in a digital form if UTP wiring were used.

3.3 The examining division noted that the bandwidth of wiring is determined by its physical characteristics and pointed to two passages in the application itself, at paragraphs 0027 and 0029. The first of these passages reads as follows:

"... Given the current state of networking technologies, it is useful (for the sake of maintaining quality and minimizing costs) to provide separate signal paths for real-time audio/video and classical asynchronous data communications (...). At the moment, analog methods for carrying real-time audio/video are preferred. In the future, digital methods may be used."

This passage does not refer to UTP wiring at all, and certainly does not rule out the possibility that it might be surprising that high-quality analogue TV signals could be carried on UTP.

The second passage does state that for the complete network, i.e. data and AV, it was preferred to use the "commonly installed 4-pair UTP telephone wires." While it is noteworthy that this passage does not actually state that it was surprising that such wiring sufficed for analogue transmission of AV signals, it also does not seem to the board to imply that such a use was necessarily known to the skilled person at the time.

3.4 The decision to refuse goes on immediately after these references to state the following:

"The LAN characteristics which were available at the date of the priority did allow the transmission of audio visual data at TV quality." Both the terms "LAN" and "data" suggest that the examining division was thinking of transmission of the AV signals in a digital, not analogue, form.

Again, immediately after this assertion, the decision states:

"Furthermore document D4 shows (see figure 1), the reproduction of a video image at TV quality as well as the transmission of data over digital telephone lines. The skilled person is aware that digital telephone lines in general use unshielded twisted pair wiring." This is quite clearly a reference to a digital implementation of the AV path. D4 is exclusively concerned with digital compression techniques.

3.5 In its preliminary opinion, the board also put forward a possible digital implementation of the AV path, using MPEG-2.

3.6 Such argumentation, however justified by the subject-matter previously claimed and the application's general emphasis on future possible digital implementations, is vitiated by the appellant's restriction of the claimed subject-matter to an analogue audio and visual path. Hence the newly submitted independent claim has significantly changed the issues for examination.

3.7 The appellant argues that although the means were available it would have been surprising to the skilled person that analogue audio and video signals of NTSC

full motion quality could be transmitted over UTP wiring. The prior art documents in the case indeed do not indicate that the skilled person would have known that this could be done. On the other hand, there was no reason for the search examiner in this application to look specifically for such a document; the particular combination of features has only now emerged as being an important consideration. It would appear appropriate therefore to remit the case to the examining division for further examination, including if necessary further search.

Order

For these reasons it is decided that:

1. The decision under appeal is set aside.

2. The case is remitted to the department of the first instance for further prosecution on the basis of the claims according to the main request submitted in the course of the oral proceedings on 18 May 2005.

The Registrar: The Chairman:

D. Magliano A. S. Clelland